CITY COUNCIL WORK SESSION

JUNE 25, 2026 @ 9:30 AM
MONETT CITY ANNEX

AGENDA

I. Call to Order

II. Pledge of Allegiance

III. Approval of the Agenda

IV. Regular Business

A. First and Second Reading and Consideration for Approval of Ordinance No. 9169: An Ordinance for the Construction Management Agreement Number 1 for the 80' X 80' City Hangar Construction Project Located at the Monett Regional Airport

B. Discussion: Inflow and Infiltration Maintenance Contract

C. Discussion: MPUA Loan

D. Discussion: ADA Website

E. Discussion: TAP Sidewalk Project

F. Discussion: Budget Adjustments

G. Discussion: Gateway Sign Project

H. Discussion: Flagpole - American Legion

I. Discussion: Implementing a Vacant Building Registry and Property Maintenance Program for the City of Monett

J. Discussion: Rezoning a Part of the Monett Veterinary Hospital's Land

V. Council Comments

VI. Informational Items

A. Next Regular City Council Meeting: July 9, 2026, at 6:00 p.m. at the Monett City Annex

B. Next City Council Work Session: July 23, 2026, at 9:30 a.m. at the Monett City Annex

VII. Closed Session Notice: Council will convene into closed session pursuant to Section 610.021, RSMo., Subsections (1), (2), (3), and (22), to discuss legal matters, real estate, personnel matters, and software configurations or network security.

VIII. Adjournment

James R. Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

www.cityofmonett.com
217 Fifth Street • Monett, Missouri 65708
(417) 235-3763

Staff Report

To: Mayor & Commissioner

From: City Administrator

Date: June 25, 2026

Re: Aviation Project Consultant Supplemental Agreement with Woolpert Inc. for City Hangar

GENERAL INFORMATION

The supplemental agreement with Woolpert Inc. is to cover construction oversight. The details of the agreement are attached. The scope of work is defined.

PROPOSAL

Approve the ordinance required by the MoDOT Aviation Division for the project.

RECOMMENDATION

Approve the ordinance with a double reading at the June 25 Work Session.

ATTACHMENTS

- Ordinance
- Agreement No. 1

BILL NO. 9169 **ORDINANCE NO. 9169**

AN ORDINANCE FOR THE CONSTRUCTION MANAGEMENT AGREEMENT NUMBER 1 FOR THE 80' X 80' CITY HANGAR CONSTRUCTION PROJECT LOCATED AT THE MONETT REGIONAL AIRPORT

WHEREAS, the City of Monett has conducted the letting for construction bids for the City hangar construction project located at the Monett Regional Airport, 1215 State Hwy 97, Pierce City, Missouri 65723; and

WHEREAS, the project is funded by the Missouri Department of Transportation - Aviation Sector with a project number of 24-0988-1; and

WHEREAS, the construction bid has been awarded to Base Construction Management, 620 W. Republic Road, Springfield, Missouri 65807; and

WHEREAS, the project calls for construction management services.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI, AS FOLLOWS:

Section 1. Approval of the Aviation Project Consultant Supplemental Agreement Number One – Construction Services Project No. 24-098B-1 as presented by Woolpert, Inc. 12200 NW Ambassador Drive, Suite 610, Kansas City, MO. 64163.

Section 2. The agreement cost shall be $128,443.70 as outlined in the schedule of costs.

Section 3: Terms of the agreement are outlined in the Aviation Project Consultant Supplemental Agreement No. 1 as attached.

Whereupon a roll call vote was taken:

Ayes: _____

Nayes: _____

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI, THIS 25TH DAY OF JUNE 2026.

_____

James R. Burke, Mayor

ATTEST:

_____

Kelley McMillan, City Clerk

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

Airport Name: Monett Regional Airport
Project No.: 24-098B-1
County: Barry

AVIATION PROJECT CONSULTANT SUPPLEMENTAL AGREEMENT NO. 1
CONSTRUCTION SERVICES

THIS SUPPLEMENTAL AGREEMENT NO. 1 for Construction Services is entered into by the City of Monett, Missouri (hereinafter, "Sponsor") and Woolpert, Inc.(hereinafter, "Consultant").

WITNESSETH:

WHEREAS, the Sponsor and the Consultant entered into an Agreement on December 18, 2024, to accomplish a project at the Monett Regional Airport, (hereinafter, "Original Agreement"); and

WHEREAS, the Sponsor and the Consultant now desire to enter into Supplemental Agreement No. 1 to otherwise complete, extend or continue the Original Agreement as provided herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants, and representations contained herein the parties agree as follows:

(1) SCOPE OF SERVICES:

(A) The Services to be provided by the Consultant under Supplemental Agreement No. 1 are additional services which are beyond the scope of services provided in the Original Agreement. These additional professional services are generally described and defined in Section (17) of the Original Agreement and Exhibit II - SA1, which is attached hereto and incorporated herein by reference.

(2) FEES AND PAYMENTS:

(A) The Consultant shall be reimbursed in accordance with Section (8)(State) or (9)(Federal) of the Original Agreement.

(B) The costs of Supplemental Agreement No. 1 shall be in addition to the cost of the Original Agreement.

(C) The lump sum fee and maximum amount payable included in Section (9) of the Original Agreement are hereby modified for Supplemental Agreement No. 1 to be cost plus fixed fee not to exceed as follows:

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	ORIGINAL AMOUNT	SUPPLEMENTAL AGREEMENT NO. 1	TOTAL
Fixed Fee	$0.00	$1,000.00	$1,000.00
Max. Fee Payable	$245,916.33	$128,443.70	$374,360.03

(D) Estimated costs for the services in Supplemental Agreement No. 1 are defined in Exhibit IV - SA1 and Exhibit V - SA1, which are attached hereto and incorporated herein by reference.

(3) PERIOD OF SERVICE: Exhibit VI, Performance Schedule, of the Original Agreement is hereby revised to include time for the performance of these additional services. The projected completion date is revised to December 31, 2026, which includes time for performance of all remaining services in the Original Agreement and the services in Supplemental Agreement No. 1 and submittal of all deliverables.

(4) DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:

(A) DBE Goal: The following DBE goal has been established for this Supplemental Agreement No. 1. The dollar value of services and related equipment, supplies, and materials used in furtherance thereof which is credited toward this goal will be based on the amount actually paid to DBE firms. The goal for the percentage of services to be awarded to DBE firms is 0% of the total Supplemental Agreement No. 1 dollar value.

(B) DBE Participation Obtained by Consultant: The Consultant has obtained DBE participation, and agrees to use DBE firms to complete 0% of the total services to be performed under this Supplemental Agreement No. 1 by dollar value. The DBE firms which the Consultant shall use, and the type and dollar value of the services each DBE will perform, is as follows:

DBE FIRM NAME, STREET AND COMPLETE MAILING ADDDRESS	TYPE OF DBE SERVICE	TOTAL $ VALUE OF THE DBE SUBCONTRACT	CONTRACT $ AMOUNT TO APPLY TO TOTAL DBE GOAL	% OF SUBCONTRACT $ VALUE APPLICABLE TO TOTAL GOAL
TSI Geotechnical, Inc. 8248 NW 101st Terr., #5 Kansas City, MO 64153	Materials Testing	$29,215.70	$29,215.70	100%

(5) SUBCONSULTANTS:

(A) The Consultant agrees that except for those firms and for those services listed below, there shall be no transfer of engineering services performed under this Supplemental Agreement No. 1 without the written consent of the Sponsor. Subletting, assignment, or transfer of the services or any part thereof to any other corporation, partnership, or individual is expressly prohibited. Any violation of this clause will be deemed cause for termination of this Supplemental Agreement No. 1.

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Exceptions (Subconsultant Information):

FIRM NAME	COMPLETE ADDRESS	NATURE OF SERVICES
Vertex Engineering	2420 W. 26th Ave., Suite 100-D, Denver, CO 80211	Structural Engineering

(6) ORIGINAL AGREEMENT: Except as otherwise modified, amended, or supplemented by this Supplemental Agreement No. 1, the Original Agreement between the parties shall remain in full force and effect and the terms of the Original Agreement shall extend and apply to this Supplemental Agreement No. 1.

IN WITNESS WHEREOF, the parties have entered into this Supplemental Agreement No. 1 on the date last written below.

Executed by the Consultant this 6th day of April, 2026.

Executed by the Sponsor this 26th day of April, 2026.

CONSULTANT:
Woolpert, Inc.

By DocuSigned by: Jason Virzi 88C66044F188434...

Title Vice President

SPONSOR:
City of Monett, Missouri

By Signed by: 4032EC8490004D4...

Title Mayor of Monett

ATTEST:

By Signed by: Jason Wehmeyer 8AFFA981B26A460...

Title Construction Manager

ATTEST:

By Signed by: Kelley McMillan 6356702EC34E4FE...

Title City Clerk

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EXHIBIT II - SA1

SCOPE OF SERVICES

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SCOPE OF WORK
FOR
MONETT REGIONAL AIRPORT
Monett, Missouri
MoDOT Project No. 24-098B-1
Construct New Hangar
(Construction Phase Services)

This is an Appendix attached to, made a part of and incorporated by reference with the Professional Services Agreement dated December 18, 2019, between the City of Monett and Woolpert, Inc., for providing professional services. For the remainder of this scope the Monett Regional Airport is indicated as "Sponsor" and Woolpert, Inc., is indicated as "Engineer." The construction budget for this project is approximately $1,250,000.00. This construction budget does not include administrative, legal, or professional fees.

This project shall consist of Construction Administration, Post-Construction Coordination, and On-Site Construction Survey for the Construct New Hangar Building Project. This scope of work is for the consulting services provided by the Engineer for the Sponsor. See Exhibit No. 1 below for the project location.

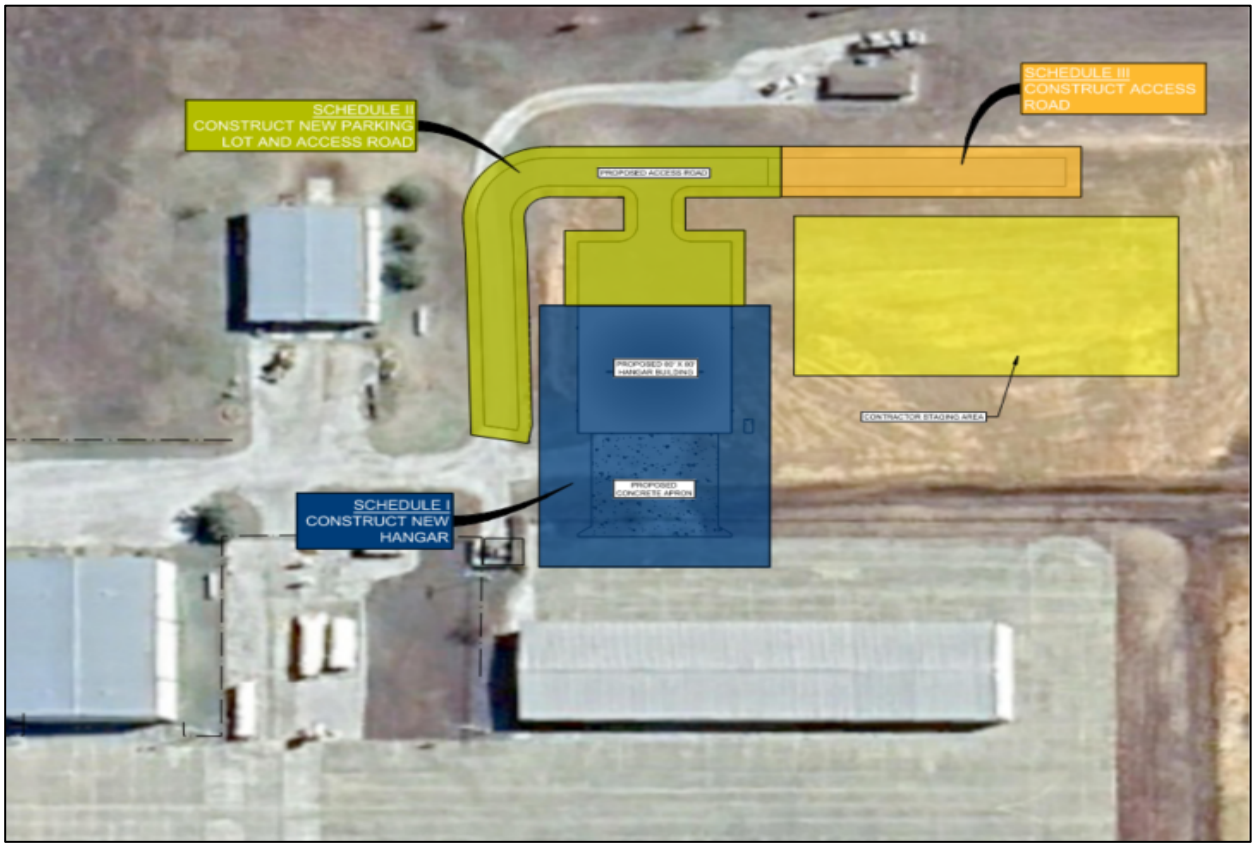

EXHIBIT NO. 1

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

DESCRIPTION

This project shall consist of constructing an 80’ x 80’ hangar for the Monett Regional Airport. The hangar is intended to accommodate additional tenants at the airport, with the ability to service a selected range of aircraft. The hangar will be constructed as a prefabricated building on top of an engineered foundation.

The design will include recommendations from a structural engineer and a geotechnical engineer. It is anticipated, at a minimum, that concrete footings will be required under the concrete floor. Due to the expansive soils in this area, it is possible the hangar floor will require a structural fill or base course prior to installation of the floor.

The prefabricated hangar building will be fully equipped with electrical systems to power both the hangar door and interior lighting. To maintain a controlled climate within the hangar, radiant heating served by propane gas and air ventilation will be included as part of the design. The Project Manager will collaborate closely with local utility providers to ensure the seamless provision of power and gas to the new hangar facility.

A hydraulic or bi-fold door, along with two pedestrian doors, will also be included as part of the design. The hydraulic or bi-fold door will be electrically operated for convenient opening and closing. The hangar design will additionally incorporate two pedestrian doors to facilitate access for personnel and visitors.

The engineering fees for this project will include **Part B-Special Services,** which includes**;** 5) Construction Administration Phase, 6) Post-Construction Coordination Phase, 8) On-Site Construction Survey Phase, and Reimbursable Costs During Survey and Construction. Additional services that will be completed by subconsultants to the Engineer, including structural design and quality assurance testing during construction will also be included under **Part B-Special Services.** Part B and the three phases are described in more detail below.

5.0 Construction Administration Phase

5.01 Prepare Project Scope of Work and Contract. This task includes establishing the scope of work. Fees shall be negotiated with the Sponsor and may be subject to an independent fee estimate conducted by a third party hired by the Sponsor. This task also includes drafting the contract for the work to be completed by the Engineer for the Sponsor once negotiations are complete.

5.02 Prepare Construction Contract and Documents. In agreement with MoDOT, the Engineer shall prepare the Notice of Award, Notice to Proceed, and Contract Agreements, including bonds and insurance documents, which will be updated to include all addenda items issued during bidding, for the Sponsor's approval and signatures. Approximately five copies will be submitted to the successful Contractor for their signatures.

The Engineer will ensure the construction contracts are in order, the bonds have been completed, and the Contractor has been provided with adequate copies of the Construction Plans, Specifications, and Contract Documents, which will be updated to include all addenda items issued during bidding.

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5.03 Provide Project Coordination. The Engineer shall provide project management and coordination services to ensure the completion of all construction management tasks required of the Engineer. These duties include:

- Time the Engineer spends planning, organizing, securing and scheduling resources, and providing instruction to staff to meet project objectives as defined in the approved scope of work.
- Additional items to be accomplished include compiling and sending additional information requested from the office to related parties, maintaining project files as necessary and other items necessary in day-to-day project coordination.
- Attend weekly Owner-Engineer-Contractor meetings throughout the duration of the project. It is estimated to take 210 Calendar Days to complete the project.
- Coordinate, review, and provide a response to construction and general project Requests for Information (RFIs).
- The Project Manager will review progress reports weekly and monthly.
- Assist with change orders and supplemental agreements as necessary. All change orders and supplemental agreements will be coordinated with the Sponsor and MoDOT staff prior to execution. All change orders and supplemental agreements will be prepared in accordance with the FAA Standard Operating Procedure (SOP) 7.0, *Airport Improvement Program Construction Project Change Orders*.
- The Engineer will consult with and provide guidance to the on-site Airport personnel regarding completion of project documentation such as, but not limited to, weekly progress reports, weekly wage rate interviews, and weekly DBE compliance reports.
- Senior construction management staff will consult with and provide guidance to the on-site Airport personnel regarding unique project elements; material quality, production, and/or placement issues; and any other difficulties encountered during construction.
- Clerical staff shall prepare the quantity sheets, testing sheets, construction report format, etc.
- Office engineering staff, CAD personnel and clerical staff shall be required to assist the Field Personnel as necessary during construction. Specific tasks to be accomplished include providing secondary engineering opinions on issues arising during construction, maintaining project files as necessary and various other tasks necessary in the day-to-day operations.
- The Engineer will prepare and submit monthly invoicing.

The Engineer will complete the following tasks:

- Provide the Sponsor with a monthly Project Status Report (PSR), in writing, reporting on Engineer's progress and any problems that may arise while performing the work. The PSR must include an update of the project schedule, as described in this section, when schedule changes are expected.

5.04 Review Environmental Documentation. This task includes the review of the overall environmental exhibit in relation to final construction documents as well as coordination throughout construction to ensure environmental commitments are maintained and environmental resources are protected.

5.05 Coordinate Quality Assurance Testing. This task includes preparing the requirements for quality assurance testing. Negotiating with the quality assurance firm for a cost to perform the work is also included in this task.

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5.06 Prepare/Conduct Pre-Construction Meeting. The Engineer will conduct a pre-construction meeting to review FAA requirements as required per FAA AC 150/5370-12 (Current Edition), *Quality Management for Federally Funded Airport Construction Projects*, prior to the commencement of construction. It is anticipated that representatives of the Engineer will include the Architecture Project Manager, Engineering Project Manager, and Construction Manager. As a part of this meeting, the Engineer will also discuss the environmental plan sheet, surveyed areas, and environmental commitments. The meeting will be held at the airport and will include the Sponsor, MoDOT (if possible), Contractor, subcontractors, and airport tenants affected by the project.

5.07 Prepare/Submit Construction Observation Program. This task includes preparing and submitting the Construction Observation Program, which includes resumes of project personnel representing the stakeholders, detailed inspection procedures, required submittal processes, quality control testing methods, quality assurance testing methods, final test result summary forms, and the Contractor's Quality Control Program (CQCP). The Construction Observation Program shall be prepared to follow the requirements of FAA AC 150/5370-12 (Current Edition), *Quality Management for Federally Funded Projects*.

5.08 Review Contractor's Safety Plan Compliance Document. This task includes reviewing and providing comments on the Contractor's Safety Plan Compliance Document (SPCD) as required per FAA AC 150/5370-2 (Current Edition), *Operational Safety on Airports During Construction.* The Engineer shall review to ensure that all applicable construction safety items are addressed and meet the requirements of AC 150/5370-2 (Current Edition) and the Contract's Construction Safety and Phasing Plan (CSPP). The intent of the SPCD is to detail how the Contractor will comply with the CSPP. Following award of the project to the successful Contractor, and prior to the issuance of the Notice to Proceed, the Engineer will review the SPCD, provide comments, and, ultimately, approval of the document. It is anticipated that the document will require at least one re-submittal by the Contractor to address any missing information. An approved copy of the SPCD shall be provided to MoDOT.

5.09 Review Contractor's Quality Control Program. This task includes reviewing and providing comments on the Contractor's Quality Control Program (CQCP) as required per Item C-100 of FAA AC 150/5370-10 (Current Edition), *Standard Specifications for Construction of Airports.* The Engineer shall review the CQCP to ensure that all applicable quality control items are addressed and meet the requirements of Item C-100 and the project's technical specifications. The intent of the CQCP is to detail the methods and procedures that will be utilized to ensure that all materials and construction items are provided and completed in conformance with the project's plans, technical specifications, and/or other applicable requirements. Furthermore, the CQCP shall establish and describe corrective action plans to be implemented should any materials or production processes vary beyond pre-established quality control limits. Following the award of the project to the successful Contractor, and prior to the issuance of the Notice to Proceed, the Engineer will review the CQCP, provide comments, and, ultimately, approval of the document. It is anticipated that the document will require at least one re-submittal by the Contractor to address any missing information. The approved CQCP will be incorporated into the Engineer's Construction Observation Program and submitted to MoDOT.

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5.10 Review Construction Submittals. This task includes the review of construction submittals, including shop drawings and materials proposed for use on the project, submitted by the Contractor, for general conformance with the Construction Plans, Specifications, and Contract Documents. The Engineer will prepare and maintain a submittal register to log the submittals received. The submittal register will include information on the submitted items including date received, date returned, and action taken, and will be made available to the Sponsor and Contractor upon request. The submittals anticipated to be required and the estimated time it will take to review each submittal are detailed below.

Submittal Description		**Estimated Time to Review (Hours)**
Item C-102	Erosion Control Products	2
Item P-101	Pavement Removal Means & Methods	2
Item P-152	Pre-Construction Survey	4
Item P-152	Embankment/Imported Fill Material	2
Item P-153	Flowable Fill (CLSM) Mix Design	2
Item P-154	Subbase Course	2
Item P-154	Separation Geotextile	2
Item P-208	Aggregate Base Course	4
Item P-501	Cement Concrete Pavement Mix Design	8
Item P-501	Miscellaneous Components (Rebar, Dowel Bars, Joint Filler, etc.)	4
Item P-610	Structural Concrete Mix Design	8
Item P-610	Miscellaneous Components (Rebar, Curing Matl., Joint Filler, etc.)	2
Item P-620	Paint and Beads	2
Item F-162	Fence and Gate Materials (Fabric, Barbed Wire, Posts, Rails, etc.)	2
Item D-701	Pipe and Pipe Joining Materials	2
Item D-701	Pipe Bedding and Embedment Materials	2
Item T-901	Seed/Fertilizer/Tackifier/Hydromulch	2
ARCH	Prefabricated Metal Building Components	25
ARCH	Mechanical, Electrical, & Plumbing Components	20
ARCH	Miscellaneous Architectural Components	15
Total Review Time		**112**

Additionally, it is anticipated that there will be a number of resubmittals for the various items to address comments from the Engineer's initial review. It is estimated that reviews of these resubmittals will add approximately 10%, or 12 hours, to the estimated submittal review time from the table above, resulting in an overall estimated submittal review time of 124 hours.

5.11 Prepare Requests for Reimbursement. This task includes preparing the FAA Standard Form 271 for Sponsor reimbursement of eligible expenses incurred on a monthly basis. The Engineer will submit the completed form along with appropriate supporting documentation to the Sponsor for review and approval. Upon approval, the Engineer or the Sponsor will submit the completed forms and supporting documentation to MoDOT for reimbursement. It is estimated there will be seven (7) RFRs for expenses incurred during the construction and closeout phase of the project.

5.12 Perform Site Visits During Construction. The Architecture Project Manager shall make on-site visits, as required, throughout the duration of the project. At this time, it is estimated that the Project Manager will make up to two site visits to the project.

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TASK 5 DELIVERABLES	TO FAA/STATE	TO SPONSOR
5.01 Construction SOW and Contract	✓	✓
5.02 Notice of Award, Notice to Proceed, and Contract Agreement		✓
5.02 Issue Construction Plans, Specifications, and Contract Documents	✓	✓
5.03 Monthly Invoice and Monthly PSR		✓
5.03 Pay Request Review Documentation		✓
5.03 Weekly/Monthly Reports	✓	✓
5.03 Change Orders/Supplemental Agreements	✓	✓
5.06 Pre-Construction Agenda and Meeting Minutes	✓	✓
5.07 Construction Observation Program	✓	✓
5.08 Approved Safety Plan Compliance Document (SPCD)	✓	✓
5.09 Approved Contractor Quality Control Program (CQCP)	✓	✓
5.11 Requests for Reimbursement	✓	✓

TASK 5 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
5.06 Conduct Pre-Construction Meeting	• Monett, MO One (1) Architecture Project Manager, one (1) Engineering Project Manager, and one (1) Project Engineer Assume full day site visit (1 site visit) Assume travel to/from Kansas City, MO to Monett, MO for Engineering Project Manager and Project Engineer Assume Architecture Project Manager attends meeting via teleconference
5.12 Perform Site Visits During Construction	• Monett, MO One (1) Architecture Project Manager Assume full day site visit (2 site visits) Assume travel to/from Denver, CO to Monett, MO with one (1) overnight stay for Project Manager for each site visit

6.0 *Post-Construction Coordination Phase*

6.01 Prepare Final Testing Report. The Engineer will submit the quality assurance testing summary report, which will include a narrative of tests taken, verification for minimum number of tests, discussion of problems and tests necessary, and a table (from Construction Observation Program) including the actual number of tests taken for each specification item to MoDOT for review and approval.

6.02 Prepare Clean-up Item List. The Engineer will ensure the Contractor has removed all construction equipment and construction debris from the airport, that all access points have been re-secured (fences repaired, gates closed and locked, keys returned, etc.), and the site is clean.

6.03 Conduct Final Inspection. The Engineer, along with the Sponsor and MoDOT (if available), shall conduct the final inspection. The quality assurance testing summary report must be accepted by MoDOT prior to final inspection.

6.04 Prepare Engineering Record Drawings. The Engineer will prepare the record drawings indicating modifications made during construction. The record drawings will be provided to MoDOT electronically.

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6.05 Prepare Final Construction Report. The Engineer will prepare the final construction report to meet the applicable FAA closeout checklist requirements.

6.06 Update and Modify Airport Layout Plan (ALP). The Engineer will review and update the ALP to reflect the work completed for this project. A draft version of each sheet will be submitted to the ADO for review. Upon approval by MoDOT, the Engineer shall assist the Sponsor in preparing copies for signature of the revised sheets and submitting to MoDOT for final approval.

6.07 Summarize Project Costs. The Engineer will be required to obtain all administrative expenses, engineering fees and costs, testing costs, and construction costs associated with the project and assemble a total project summary. The summary will be analyzed with the associated project funding.

TASK 6 DELIVERABLES	TO FAA/STATE	TO SPONSOR
6.01 Final Testing Report	✓	✓
6.02 Clean-up List		✓
6.03 Punchlists	✓	✓
6.04 Record Drawings	✓	✓
6.05 Final Construction Report	✓	✓
6.06 Updated ALP	✓	✓
6.07 Project Cost Summary	✓	✓

TASK 6 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
6.03 Conduct Final Inspection	• Monett, MO One (1) Architecture Project Manager and One (1) Project Engineer Assume full day site visit (1 site visit) Assume travel to/from Kansas City, MO to Monett, MO for Project Engineer and to/from Denver, CO for Architecture Project Manager, with one (1) overnight stay for Architecture Project Manager for each site visit

7.0 On-Site Construction Survey Phase

7.01 Provide Construction Survey Control. Prior to the beginning of construction, the Surveyor will verify existing project control and move/set additional control outside of grading limits to control the project. Project control will be tied to existing airport control points and updated positions will be provided to the Contractor for use during the project. Surveying will be performed under the direct supervision of a state-licensed Professional Land Surveyor.

TASK 7 DELIVERABLES	TO FAA/STATE	TO SPONSOR
7.01 Provide Survey Control Report		✓

TASK 7 MEETINGS/SITE VISITS	LOCATION/ATTENDEES/DURATION
7.01 Provide Survey Control	• Monett, MO One (1) Surveyor Assume full day site visit (1 site visits) Assume travel to/from Denver, CO to Monett, MO with two (2) overnight stays for the Surveyor

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EX Reimbursable Costs During Survey. This section includes reimbursable items such as auto rental, lodging, per diem, travel and other miscellaneous costs incurred in order to complete **Part B – Special Services**. Section 5 and 6 Reimbursables are invoiced on a lump sum basis, and Section 7 Reimbursables are invoiced on a cost plus fixed fee basis.

Special Considerations

The following special considerations are required for this project but will be completed by subconsultants to the Engineer. The cost for this work will be included in the engineering contract agreement with the Sponsor and the costs are in addition to the engineering fees outlined above.

Structural Engineering. A licensed Structural Engineer will be retained to provide construction administration services over their design of required structural elements for the project area. This includes the following:

- Existing Condition Verification
- Demolition / Temporary Support Design
- Foundation Design
- Framing Design (columns, beams, walls, roof)
- Structural Calculations
- Structural Drawings, Details,
- Structural Technical Specifications

Quality Assurance Testing. Quality assurance testing will be performed by an independent testing firm under the direct supervision of the Engineer. All quality assurance test summaries must be accepted by MoDOT prior to final inspection. Certified materials technicians will perform the necessary material quality assurance testing for the following items, as detailed in the project specifications:

- Item P-152 Excavation and Embankment
- Item P-153 Controlled Low-Strength Material (CLSM)
- Item P-154 Subbase Course
- Item P-208 Crushed Aggregate Base Course
- Item MO-209 Aggregate Base Course
- Item MO-401 Plant Mix Bituminous Pavements
- Item P-501 Portland Cement Concrete Pavement
- Item P-610 Structural Portland Cement Concrete
- Required Special Inspections and Tests for Hangar Construction, as specified by the Structural Engineer on plan sheet S0.1.

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Assumptions

The scope of services described previously, and the associated fees, are based on the following rates and assumed responsibilities of the Engineer and Sponsor.

1. For the purposes of estimating the amount of reimbursable expenses which will be incurred by the Engineer, the cost of per diem and lodging are calculated in accordance with current GSA rates. The actual amount to be invoiced for per diem will be in accordance with the published GSA rate at the time of service and may vary from the rate used in the fee estimate. Lodging will be invoiced as an actual expense incurred.
2. During periods of On-Site Construction Coordination covered under Task 7, a $5/day surcharge will be added to the daily vehicle charge which will be reflected in the Engineering Fee as a daily "Field Vehicle and Equipment" expense. This surcharge is intended to cover consumables (such as marking paint, lath, etc.) and the replacement of tools (such as measuring wheels, airfield radios, infrared thermometers, etc.) necessary to monitor and identify the various aspects of the work.

3. It is anticipated there will be a minimum number of trips and site visits to the airport to facilitate the completion of the various phases listed in this scope. The number of trips, as well as the anticipated lengths and details of the trips, are included at the end of each phase above.

4. The Sponsor will provide existing mapping data including as-builts available for the project areas, aerial orthoimagery, subsurface conditions information such as prior geotechnical investigations in the project area and other available information in the possession of the Sponsor.

5. The Sponsor will provide an electronic copy of the current ALP to allow for updating of the plan upon completion of the project.

6. The Sponsor will furnish escorts as needed for the Engineer to conduct field work.

7. The Sponsor will coordinate with tenants as required to facilitate field evaluations and construction.

8. All engineering work will be performed using accepted engineering principles and practices and provide quality products that meet or exceed industry standards. Dimensional criteria will be in accordance with FAA AC 150/5300-13 (Current Edition), *Airport Design,* and related circulars. Construction specifications will be in accordance with FAA AC 150/5370-10 (Current Edition)*, Standard Specifications for Construction of Airports,* and the Central Region's Regional Updates for Specifying Construction of Airports and related circulars. Project planning, design, and construction will further conform to all applicable standards, including all applicable current FAA Advisory Circulars and Orders required for use in AIP-funded projects and other national, state, or local regulations and standards, as identified and relevant to an airfield design and construction project.

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

9. The Engineer will utilize the following plan standards for the project:

   - ✈ Plans will be prepared using the Engineer's standards, unless the Sponsor provides its own standards upon Notice to Proceed.
   - ✈ Plan elevations will be vertical datum NAVD 88 derived from the existing control network.
   - ✈ Plan coordinates will be based on horizontal datum NAD 83/2011 State Plane Coordinates derived from the existing control network.
   - ✈ All plans will be stamped and signed by a state-licensed Professional Engineer, or Professional Land Surveyor, as required.
   - ✈ Plans prepared by subconsultants will be prepared using the same base maps, the same coordinate systems and the same plan layout and format as plans prepared by the Engineer.
   - ✈ The guidance included in FAA Memorandum, *FAA Review of Construction Plans and Specifications for AIP Funded Projects*, will be reviewed, incorporated and will supplement the Engineer's standards.

10. The Engineer will utilize the following assumptions when preparing the project manual for bidding and construction of the project:

    - ✈ The project manual Contract Documents will be developed jointly by the Sponsor and the Engineer.
    - ✈ The Engineer is responsible for developing the contents of the document and including the Front-End documents which will be supplied by the Sponsor.
    - ✈ FAA General Provisions and required contract language will be used.

11. The Engineer must maintain records of design analyses and calculations consistent with typical industry standards, as required by the FAA, for a period of three years after the project is closed by the FAA.

12. Because the Engineer has no control over the cost of construction-related labor, materials, or equipment, the Engineer's opinions of probable construction costs will be made on the basis of experience and qualifications as a practitioner of his/her profession. The Engineer does not guarantee that proposals for construction, construction bids, or actual project construction costs will not vary from Engineer's estimates of construction cost.
13. An AC 150/5300-18B (or Current Edition) compliant survey is not required as a part of this project. No data will be submitted to Airports GIS (AGIS) through the Airport Data and Information Portal (ADIP).

Additional Services

The following items are not included under this agreement but will be considered as extra work:

- ✈ Due to the recent changes to the Federal DBE program, no services for setting DBE Program or Project Goals can be provided at this time, and are not included in this scope of work. If these services are requested after the new certification process has been completed, and notice of completion is provided by the Civil Rights Office, Certifying Agencies, or FAA, they will be under a separate scope of work, or an amendment to this scope of work.

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

- Redesign for the Sponsor's convenience or due to changed conditions after previous alternate direction and/or approval.
- Submittals or deliverables in addition to those listed herein.
- If a project audit occurs, the Engineer is prepared to assist the Sponsor in gathering and preparing the required materials for the audit.
- Serving as an expert witness for the Owner in any litigation, surety claim, contractor bond activation, or other proceeding involving the project.
- Additional or extended services during construction made necessary by extension of contract time, non-concurrent work, or changes in the work.
- Legal, surety, or insurance support, coordination, and representation.
- On-Site Construction Management services are not part of this scope of work. If during construction it is determined that On-Site Construction Management services are required, they will be provided as an Additional Service at a unit rate of $175/hour and include vehicle, per diem, and lodging expenses as necessary.

Extra Work will be as directed by the Sponsor in writing for an additional fee as agreed upon by the Sponsor and the Engineer.

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS (CONSTRUCTION)

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EXHIBIT V - SA1

ENGINEERING CONSTRUCTION SERVICES-COST BREAKDOWN

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

EXHIBIT IV

DERIVATION OF CONSULTANT PROJECT COSTS

MONETT REGIONAL AIRPORT
PIERCE CITY, MO

CONSTRUCTION PHASE SERVICES
March 18, 2026

1 DIRECT SALARY COSTS:

TITLE	HOURS	RATE/HOUR	COST ($)
Practice Operations Leader	2	$ 100.00	$ 200.00
Prgrm Dir II	2	$ 100.00	$ 200.00
Arch Project Mgr III	6	$ 77.00	$ 462.00
Arch Project Mgr II	102	$ 68.00	$ 6,936.00
Engineer III	20	$ 83.00	$ 1,660.00
Engineer Project Mgr IV	14	$ 90.00	$ 1,260.00
Engineer in Training II	159	$ 55.00	$ 8,745.00
Engineer I	72	$ 55.00	$ 3,960.00
Project Coordinator II	18	$ 45.00	$ 810.00
Grants Administrator I	28	$ 45.00	$ 1,260.00
Planner III	4	$ 83.00	$ 332.00
Geospatial Project Mgr I	3	$ 58.00	$ 174.00
Survey Field Tech III	32	$ 39.00	$ 1,248.00
SV Team Leader I	8	$ 45.00	$ 360.00

Total Direct Salary Costs = $ 27,607.00

2 LABOR AND GENERAL ADMINISTRATIVE OVERHEAD:

Percentage of Direct Salary Costs @ 203.86% = $ 56,279.63

3 SUBTOTAL:

Items 1 and 2 = $ 83,886.63

4 PROFIT:

15% of Item 3 Subtotal* 11.27% = $ 9,450.37
*Note: 0-15% Typical

Subtotal = $ 93,337.00

5 OUT-OF-POCKET EXPENSES:

a. Auto Rental	9	Day @	$130.00	/ Day =	$1,170.00
b. Lodging (Taxes & Fees included)	3	Day @	$130.00	/ Day =	$390.00
c. Per Diem	9	Day @	$68.00	/ Day =	$612.00
d. Travel & Airline Costs	3	Trip @	$500.00	/ Trip =	$1,500.00
e. Survey Field Vehicle	3	Day @	$135.00	/ Day =	$405.00
f. Survey Lodging + Taxes & Fees	2	Day @	$130.00	/ Day =	$260.00
g. Survey Per Diem	3	Day @	$68.00	/ Day =	$204.00
h. Survey Supplies and Equip.	1	Each @	$150.00	/ Each =	$150.00

Total Out-of-Pocket Expenses = $4,691.00 Not to exceed

6 SUBCONTRACT COSTS:

a. TSi Geotechnical, Inc. = $29,215.70
b. Vertex Engineering (Structural) = $1,200.00

= $30,415.70 Not to exceed

7 MAXIMUM TOTAL FEE:

Items 1, 2, 3, 4, 5 and 6 = $ 128,443.70

Actual Fee Sheet Amount due to rounding = $128,443.70 Not to exceed

Docusign Envelope ID: C87A4A15-6FA8-4442-AA91-44821793CB72

AIRPORT: Monett Regional Airport
AIP/PROJ. NO.: 24-098B-1
PROJECT NAME: Construct New Hangar (Construction Phase Services)
DATE: February 16, 2026

WOOLPERT

FEE BREAKDOWN

Labor Category	Total Hours		Billing Rate			Total Cost
5.0 Construction Administration Phase (Lump Sum)						
Practice Operations Leader	2 hrs.	x	$ 330.00 /hr	=	$	660.00
Prgrm Dir II	2 hrs.	x	$ 325.00 /hr	=	$	650.00
Arch Project Mgr III	6 hrs.	x	$ 260.00 /hr	=	$	1,560.00
Arch Project Mgr II	92 hrs.	x	$ 230.00 /hr	=	$	21,160.00
Engineer III	20 hrs.	x	$ 280.00 /hr	=	$	5,600.00
Engineer Project Mgr IV	10 hrs.	x	$ 305.00 /hr	=	$	3,050.00
Engineer in Training II	93 hrs.	x	$ 185.00 /hr	=	$	17,205.00
Engineer I	36 hrs.	x	$ 185.00 /hr	=	$	6,660.00
Project Coordinator II	8 hrs.	x	$ 150.00 /hr	=	$	1,200.00
Grants Administrator I	28 hrs.	x	$ 150.00 /hr	=	$	4,200.00
Planner III	4 hrs.	x	$ 280.00 /hr	=	$	1,120.00
SUBTOTAL	**301** hrs.		**SUBTOTAL**		**$**	**63,065.00**
Reimbursables						
Auto Rental	6 Day	x	$ 130.00 /Day=		$	780.00
Lodging + Tax & Fees	2 Day	x	$ 130.00 /Day=		$	260.00
Per Diem	6 Day	x	$ 68.00 /Day=		$	408.00
Travel & Airline Costs	2 Trip	x	$ 500.00 /Trip=		$	1,000.00
			SUBTOTAL		**$**	**2,448.00**
	PHASE SUBTOTAL				**$**	**65,513.00**

LABOR HOUR BREAKDOWN

TASK		LABOR CATEGORY											
	Start Date: 10/1/2025 End Date: 9/30/2026	Practice Operations Leader	Prgrm Dir II	Arch Project Mgr III	Arch Project Mgr II	Engineer III	Engineer Project Mgr IV	Engineer in Training II	Engineer I	Project Coordinator II	Grants Administrator I	Planner III	Phase Item Costs
5.0	**Construction Administration Phase (Lump Sum)**	Jason Virzi	Joe Pestka	Adam Acree	Tadd Irvin	Joel Wiechmann	Kevin Scherr	Jason Wehmeyer	Fu Zhang Durandal	Sierra Gharst	Wendy Werner	Morgan Einspahr	
5.01	Prepare Project Scope of Work and Contract	2		2				8					$ 2,660.00
5.02	Prepare Construction Contract and Documents				2			4		4			$ 1,800.00
5.03	Provide Project Coordination		2	4	32		2	20		4			$ 13,960.00
5.04	Review Environmental Documentation											4	$ 1,120.00
5.05	Coordinate Quality Assurance Testing							4					$ 740.00
5.06	Prepare/Conduct Pre-Construction Meeting				2		8	10					$ 4,750.00
5.07	Prepare/Submit Construction Observation Program							4					$ 740.00
5.08	Review Contractor's Safety Plan Compliance Document							4					$ 740.00
5.09	Review Contractors Quality Control Program							4					$ 740.00
5.10	Review Construction Submittals				40	20		28	36				$ 26,640.00
5.11	Prepare Requests for Reimbursement							7			28		$ 5,495.00
5.12	Perform Site Visits During Construction				16								$ 3,680.00
	TOTALS	**2**	**2**	**6**	**92**	**20**	**10**	**93**	**36**	**8**	**28**	**4**	$ 63,065.00
	PERCENTAGES	1%	1%	2%	31%	7%	3%	31%	12%	3%	9%	1%	

Labor Category	Total Hours		Billing Rate			Total Cost
6.0 Post Construction Coordination Phase (Lump Sum)						
Arch Project Mgr II	10 hrs.	x	$ 230.00 /hr	=	$	2,300.00
Engineer Project Mgr IV	4 hrs.	x	$ 305.00 /hr	=	$	1,220.00
Engineer in Training II	66 hrs.	x	$ 185.00 /hr	=	$	12,210.00
Engineer I	36 hrs.	x	$ 185.00 /hr	=	$	6,660.00
Project Coordinator II	10 hrs.	x	$ 150.00 /hr	=	$	1,500.00
SUBTOTAL	**126** hrs.		**SUBTOTAL**		**$**	**23,890.00**
Reimbursables						
Auto Rental	3 Day	x	$ 130.00 /Day=		$	390.00
Lodging + Tax & Fees	1 Day	x	$ 130.00 /Day=		$	130.00
Per Diem	3 Day	x	$ 68.00 /Day=		$	204.00
Travel & Airline Costs	1 Trip	x	$ 500.00 /Trip=		$	500.00
			SUBTOTAL		**$**	**1,224.00**
	PHASE SUBTOTAL				**$**	**25,114.00**

TASK		LABOR CATEGORY											
	Start Date: 10/1/2026 End Date: 12/31/2026	Arch Project Mgr II	Engineer Project Mgr IV	Engineer in Training II	Engineer I	Project Coordinator II							Phase Item Costs
6.0	**Post Construction Coordination Phase (Lump Sum)**	Tadd Irvin	Kevin Scherr	Jason Wehmeyer	Fu Zhang Durandal	Sierra Gharst							
6.01	Prepare Final Testing Report			8		2							$ 1,780.00
6.02	Prepare Clean-up Item List			4									$ 740.00
6.03	Conduct Final Inspection	10		10									$ 4,150.00
6.04	Prepare Engineering Record Drawings		2	8	20								$ 5,790.00
6.05	Prepare Final Construction Report		2	32	12	4							$ 9,350.00
6.06	Update and Modify Airport Layout Plan (ALP)			2	4								$ 1,110.00
6.07	Summarize Project Costs			2		4							$ 970.00
	TOTALS	**10**	**4**	**66**	**36**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	$ 23,890.00
	PERCENTAGES	8%	3%	52%	29%	8%	0%	0%	0%	0%	0%	0%	

Labor Category	Total Hours		Billing Rate			Total Cost
7.0 On-Site Construction Survey Phase (Cost Plus Fixed Fee)						
Geospatial Project Mgr I	3 hrs.	x	$ 58.00 /hr	=	$	174.00
Survey Field Tech III	32 hrs.	x	$ 39.00 /hr	=	$	1,248.00
SV Team Leader I	8 hrs.	x	$ 45.00 /hr	=	$	360.00
SUBTOTAL	**43** hrs.		**SUBTOTAL**		**$**	**1,782.00**
Direct Labor Cost				=	$	1,782.00
Overhead (% of Direct Labor Cost)			203.86%	=	$	3,600.00
Total Labor Cost				=	$	5,382.00
Fixed Fee				=	$	1,000.00
			SUBTOTAL PHASE LABOR	=	**$**	**6,382.00**
Reimbursables						
Survey Field Vehicle	3 Day	x	$ 135.00 /Day=		$	405.00
Survey Mileage	Mi	x	$ 0.700			
Survey Lodging +Tax & Fees	2 Day	x	$ 130.00 /Day=		$	260.00
Survey Per Diem	3 Day	x	$ 68.00 /Day=		$	204.00
Survey Supplies & Equip.	1 Each	x	$ 150.00 /Each=		$	150.00
Survey Travel & Airline Costs	Trip	x	$ 500.00 /Trip=			
			SUBTOTAL		**$**	**1,019.00**
	PHASE SUBTOTAL				**$**	**7,401.00**

TASK		LABOR CATEGORY											
	Start Date: 3/15/2026 End Date: 10/1/2026	Geospatial Project Mgr I	Survey Field Tech III	SV Team Leader I									Phase Item Costs
7.0	**On-Site Construction Survey Phase (Cost Plus Fixed Fee)**	Aneta Calle-Zaczek	Aaron Edge	Zachary Leesemann									
7.01	Provide Construction Survey Control	3	32	8									$ 1,782.00
	TOTALS	**3**	**32**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	$ 1,782.00
	PERCENTAGES	7%	74%	19%	0%	0%	0%	0%	0%	0%	0%	0%	

	CONTRACT HOURS		PHASE FEE	REIMBURSABLE COSTS	TOTAL COST
PART B - SPECIAL SERVICES (LUMP SUM)					
5.0 Construction Administration Phase (Lump Sum)	301		$ 63,065.00	$ 2,448.00	$ 65,513.00
6.0 Post Construction Coordination Phase (Lump Sum)	126		$ 23,890.00	$ 1,224.00	$ 25,114.00
	427	**SUBTOTAL**	**$ 86,955.00**	**$ 3,672.00**	**$ 90,627.00**
PART B - SPECIAL SERVICES (COST PLUS FIXED FEE)					
7.0 On-Site Construction Survey Phase (Cost Plus Fixed Fee)	43		$ 5,382.00	$ 1,000.00	$ 1,019.00	$ 7,401.00
	43	**SUBTOTAL**	**$ 5,382.00**	**$ 1,000.00**	**$ 1,019.00**	**$ 7,401.00**
SUBCONSULTANT 1					
TSI GEOTECHNICAL, INC.					$ 29,215.70
SUBCONSULTANT 2					
VERTEX ENGINEERING (STRUCTURAL)					$ 1,200.00
					SUBTOTAL	**$ 30,415.70**
TOTAL	**470.0**		**$ 92,337.00**	**$ 1,000.00**	**$ 4,691.00**	**$ 128,443.70**

*For the purposes of estimating the cost of mileage, per diem, and lodging are calculated in accordance with applicable IRS and GSA guidelines. At the time of invoicing mileage will be invoiced in accordance with published IRS rates at the time of service and per diem will be invoiced in accordance with published GSA rates at the time of service. Lodging will be invoiced as actual expense incurred except in the cases where specific client requirements exist that limit lodging to GSA standards.

AIRPORT ID & NAME / PROJECT NUMBER ASSIGNED BY MoDOT	PROJECT DESCRIPTION	SPONSOR UEI NUMBER
Monett Regional Airport (HFJ) / 24-098B-1	Construct New Hangar	MVQHM9HPA7C1

SPONSOR CONTACT		AGREEMENT SIGNATORIES		CONSULTANT CONTACT	
Sponsor:	City of Monett	Name Signer #1	Randy Burke	Firm Name:	Woolpert, Inc.
Primary Contact:	Steve Burnett	Email	rburke@monettmo.gov	Primary Contact:	Jason Wehmeyer
Address:	1215 State Highway 97	Name Signer #2	Kelley McMillan	Address:	12200 N. Ambassador Drive, Suite 610
City, State & Zip:	Pierce City, MO 65723	Email	kmcmillan@monettmo.gov	City, State & Zip:	Kansas City, MO 4163
Phone:	417-236-4540	Name Signer #3		Phone:	816-377-3957
Email:	sburnett@monettmo.gov	Email		Email:	jason.wehmeyer@woolpert.com

PROJECT BUDGET INFORMATION

CLASSIFICATION	TOTAL BUDGETED	FUNDS 19 NPE	FUNDS 20 NPE	FUNDS 21 NPE	FUNDS 22 NPE	FUNDS 23 NPE	FUNDS 24 NPE	FUNDS 25 NPE	FUNDS 26 NPE	FUNDS 22 BIL	FUNDS 23 BIL	FUNDS 24 BIL	FUNDS 25 BIL	FUNDS 26 BIL
	$1,630,860	90%			90%	90%	90%	95%	95%	95%	95%	95%	95%	95%
a. Administrative Expense	$600				$600									
b. Preliminary Expense	$0													
c. Land Acquisition (survey, title, etc.)	$0													
d. Engineering-Planning (Master Plan, EA, etc.)	$0													
e. Engineering-Design Basic Fees	$245,916.33	$55,415			$162,667	$27,834.33								
f. Engineering-Project Inspection	$128,443.70								$128,443.70	$0	$0			
g. Land as match	$0													
h. Relocation Expense	$0													
i. Relocation Expense-Individuals/Business	$0													
j. Demolition/Removal Expense	$0													
k. Construction Expense	$1,249,000					$138,832.67	$166,667	$157,895	$29,103.33	$163,869	$152,632	$151,579	$144,211	$144,211
l. Equipment	$0													
m. Miscellaneous-IFE Design	$3,400				$3,400									
m. Miscellaneous-IFE Construction	$3,500									$3,500				
m. Miscellaneous-FAA Reimbursable Agreement	$0													
n. Non-Participating Expenses	$0													
PROJECT TOTAL	**$1,630,861**	**$55,415**	**$0**	**$0**	**$166,667**	**$166,667**	**$166,667**	**$157,895**	**$157,547**	**$167,370**	**$152,632**	**$151,579**	**$144,211**	**$144,211**
FEDERAL SHARE TOTAL	**$1,521,542**	$49,873	$0	$0	$150,000	$150,000	$150,000	$150,000	$149,669	$159,000	$145,000	$144,000	$137,000	$137,000
LOCAL SHARE TOTAL	**$109,319**	$5,542	$0	$0	$16,667	$16,667	$16,667	$7,895	$7,878	$8,370	$7,632	$7,579	$7,211	$7,211

150,000 availabl 150,000 availabl 150,000 availabl 150,000 available 159,000 availabl 145,000 availabl Budget Sheet Version 5/18/2026

144,000 availabl *$137,000 availa *137,000 availabl

NPE FEDERAL SHARE	**$799,542**
NPE LOCAL SHARE	**$71,316**
TOTAL NPE FUNDING	**$870,858**

BIL FEDERAL SHARE	**$722,000**
BIL LOCAL SHARE	**$38,003**

James R. Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

www.monettmo.gov
217 Fifth Street • Monett, Missouri 65708
(417) 235-3763

Staff Report

To: Commissioners and City Administrator

From: Skip Schaller, PE

Date: 6/18/2026

Re: I & I Contract

GENERAL INFORMATION

Monett does about $270,000 a year in sewer rehabilitation for inflow and infiltration of the system. This work requires a contractor to do lining work.

PROPOSAL

I have had TREKK (our I & I consultant) put together a maintenance contract that has been put out to bid. This contract has all the items we need for system repairs, the contract automatically rolls over until we decide to bid again. There is an inflation adder each year. The proposal also has a 'piggyback' clause so other cities could use it, that makes it a more attractive proposal to bidders.

RECOMMENDATION

Once the bid is received, tabulated and I have an engineer's recommendation, we will need council to approve the bid at the July council meeting by ordinance and would like 2 readings so we can move forward with working with the contractor on scheduling work.

ATTACHMENTS

Copy of the bid document

SANITARY SEWER COLLECTION SYSTEM REHABILITATION IMPROVEMENTS

BIDDING DOCUMENTS

FOR THE

CITY OF MONETT, MISSOURI

JUNE 2026

STATE OF MISSOURI
NATHAN A. ADAMS
NUMBER PE-2022010967
PROFESSIONAL ENGINEER

2026.06.12 10:36:17-05'00'

SANITARY SEWER COLLECTION SYSTEM IMPROVEMENTS
CITY OF MONETT, MISSIOURI

TABLE OF CONTENTS

Advertisement for Bids
Information for Bidders
Instructions to Bidders for Construction Contract
Bid Form for Construction Contract
Bid Bond
Bidder Qualifications
Agreement Between Owner and Contractor for Construction Contract
Notice to Proceed
Performance Bond
Payment Bond
Certificate of Substantial Completion
Certification for Acceptance and Final Payment
Standard General Conditions of the Construction Contract
Supplementary Conditions
Division of Labor Standards Forms
Division of Labor Standards Prevailing Wage Law Rules
Annual Wage Order
Technical Specifications
Attachment A – City of Monett, Missouri Sanitary Sewer Basin Map

ADVERTISEMENT FOR BIDS

Sealed bids for the construction of the **Sanitary Sewer Collection System Improvements** will be received by TREKK Design Group at the office of the **Engineer: TREKK Design Group, LLC, 1955 E Phelps Street, Springfield, Missouri 65802** until 11:00 AM local time on **July 2nd, 2026**, at which time the Bids received will be publicly opened and read.

The intent of the project is to provide the City of Monett with an option of rehabilitation methods for sewer system improvements. It is the intent of the City of Monett to execute a purchase order totaling approximately $275,000 per year for the next 5 years based on the unit process submittal as part of this bid. The City will provide a written scope of work for each individual purchase order issued. Such purchase order will detail the quantities of each specific item as appropriate.

The City of Monett intends to initially focus purchase orders with rehabilitation efforts in the southeast section of Basin C. Purchase orders may include work anywhere within the City of Monett's collection system.

The items listed in the bid schedule are split into four sections. Each section may be awarded separately to the lowest responsive, responsible bidder for that specific section.

The issuing office for the bidding documents is: TREKK Design Group, LLC, 1955 E Phelps St, Springfield, MO 65802; contact Isabella Tibbets at (417) 324-7255 or itibbets@trekkdesigngroup.com. Prospective bidders may examine the Bidding Documents at the Issuing Office on Mondays through Fridays between the hours of 9:00 a.m. and 4:00 p.m.

A non-mandatory pre-bid conference will be held at the TREKK Design Group office, at the address listed above on June 23th, 2026, at 11:00 a.m. local time. For those unable to attend in-person, a virtual attendance option is available via Microsoft Teams (Meeting ID: 236 238 315 153 492 Passcode: yz6Ri2eF). Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference; however, attendance at this conference is not required to submit a Bid.

Bidders may obtain copies of the bidding documents by contacting Springfield Blue Print, 219 East Perishing St, Springfield, Missouri 65806, (417) 869-7316, www.spfdblue.com. Bidders will be responsible for purchase of any bidding documents, which are non-refundable. Copies of plans and specifications can be reviewed electronically or purchased for a non-refundable fee online at www.spfdblue.com in their eDistribution plan room. Information regarding this project can be found in the "Plan Rooms" link on the website.

Bid security shall be furnished in accordance with the Instruction to Bidders. The Owner reserves the right to reject any and all bids and to waive irregularities in the bidding, and to increase or decrease the quantity of any class or portion of the work.

The City of Monett is an Equal Opportunity Employer and invites the submission of bids from Women and Minority Business Enterprises.

Owner: City of Monett, Missouri
By: Skip Schaller
Title: Utilities Superintendent
Date: June 12th, 2026

INFORMATION FOR BIDDERS

Bids will be received by TREKK Design Group at the office of the **Engineer: TREKK Design Group, LLC, 1955 E Phelps Street, Springfield, Missouri 65802** until 11:00 AM local time on **July 2nd, 2026**, at which time the Bids received will be publicly opened and read. The project scope includes providing all labor, materials, tools and equipment necessary for the rehabilitation of wastewater collection system components. The unit prices submitted are to be utilized by the City of Monett in order to execute purchase orders. The City of Monett intends to initially focus purchase orders with rehabilitation efforts in the southeast section of Basin C. Purchase orders may include work anywhere within the City of Monett's collection system. See Attachment A – City of Monett, Missouri - Sanitary Sewer Collection System Basin Map.

The quantities within the bid schedule are only to establish low bidders for each section and do not represent anticipated quantities and are not purchased hereby, nor is the City obligated in any way to purchase the quantities shown. The intent of the bid schedule is to establish unit prices from the low bidders in each section to be used in future purchase orders. The right is reserved to exceed or diminish these quantities in future purchase orders or to omit any one or more items if desired. The items listed in the bid schedule are split into four sections. Each section may be awarded separately to the lowest responsive, responsible bidder for that specific section.

Contract documents for the project are titled as follows:

Sanitary Sewer Collection System Rehabilitation Improvements

CONTRACTOR'S bids must be submitted in a sealed envelope, addressed to TREKK Design Group, LLC, 1955 E Phelps Street, Springfield, Missouri 65802. Each sealed envelope containing a BID must be plainly marked on the outside as "BID for City of Monett – Sanitary Sewer Collection System Rehabilitation Improvements." The envelope shall bear the Bidder's name and address, and the name of the project (as listed above) for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to the TREKK Design Group, LLC at 1955 E Phelps Street, Springfield, Missouri 65802.

All bids must be made on the required bid form. All blank spaces for bid prices must be filled in, in ink or typewritten, and the bid form must be fully completed and executed when submitted. Only one copy of the bid form is required.

The Owner may waive any informalities or minor defects or reject any and all bids. Any bid may be withdrawn prior to the date and time for bid closing or authorized postponement thereof. Any bid received after the time and date specified will not be considered. No Bidder may withdraw a bid within 90 days after the actual date of opening thereof. Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the Owner and the Bidder.

Bidders must satisfy themselves of the accuracy of the estimated quantities in the bid form by examination of the site and review of the drawings and specifications including any issues addenda. After bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work or of the nature of the work to be done. The Owner shall provide to Bidders prior to bidding, all information which is pertinent to, and delineated and described, the land owned and rights-of-way acquired or to be acquired.

The Contract Documents contain the provisions required for the construction of the project. Information obtained from any offer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve the Contractor from fulfilling any of the conditions of the contract.

Each bid must be accompanied by a Bid Bond or Certified Check payable to the Owner for five (5%) percent of the total amount of the bid. As soon as the bid process have been compared, the Owner will return the Bid Bonds of all except the three (3) lowest responsible Bidders. When the agreement is executed with the successful Bidder, the Bid Bonds of the two (2) remaining unsuccessful Bidders will be returned. The Bid Bond of the successful Bidder will be retained until the Payment Bond and Performance Bond have been executed and approved, after which the Bid Bond will be returned.

A Performance Bond and Payment Bond each in the amount of one-hundred (100%) percent of the Contract Price, with a corporate surety approved by the Owner, will be required for the faithful performance of the contract.

Attorneys-in-fact, who sign Bid Bonds, Payment Bonds, or Performance Bonds must file with each Bond a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the Performance Bond and Payment Bond within ten (10) calendar days from the date when Notice of Award is issued. The Notice of Award shall be accompanied by the necessary Agreement and Bond Forms. In case of failure of the Bidder to execute the Agreement, the Owner may consider the Bidder in default, in which case the Bid Bond accompanying the bid shall become the property of the Owner.

The Owner, within ten (10) days of receipt of acceptable Performance Bond, Payment Bond, and Agreement signed by the party to whom the Agreement was Awarded shall sign the Agreement and return to such party an executed duplicate of the agreement. Should the Owner not execute the Agreement within such period, the Bidder may by written notice withdraw the signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

The Notice to Proceed shall be issued within ten (10) days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such time period; the time may be extended by mutual agreement between the Owner and the Contractor. If the Notice to Proceed has not been issued within the ten (10) day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party.

The Owner may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The owner reserves the right to reject any bid if the evidence submitted by, or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the work contemplated therein.

A conditional or qualified bid will not be accepted.

Award will be made to the lowest responsible Bidder.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

Each Bidder is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to its bid.

The low Bidder shall supply the names, addresses, and phone numbers of major suppliers and subcontractors when required to do so by the Owner.

Inspection trips for prospective Bidders can be scheduled and coordinated with the Owner, at the request of the prospective Bidders.

The Engineer is TREKK Design Group, LLC, and their contract information is as follows:

TREKK Design Group, LLC
1955 E Phelps Street
Springfield, MO 65802
Main Office – (417) 890-9465
Isabella Tibbets, Project Manager – itibbets@trekkdesigngroup.com

INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACT

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ARTICLE 1—DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office*—The office from which the Bidding Documents are to be issued, and which registers plan holders.

ARTICLE 2—BIDDING DOCUMENTS

2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.

2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.

2.03 Owner has coordinated a Bidding Documents Website as indicated in the Advertisement or invitation to bid. Owner recommends that Bidder register as a plan holder with the Issuing Office at such website, and obtain a complete set of the Bidding Documents from such website. Bidders may rely that sets of Bidding Documents obtained from the Bidding Documents Website are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.

2.04 Bidder may register as a plan holder and obtain complete sets of Bidding Documents, in the number and format stated in the Advertisement or invitation to bid, from the Issuing Office. Bidders may rely that sets of Bidding Documents obtained from the Issuing Office are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.

2.05 Plan rooms (including construction information subscription services, and electronic and virtual plan rooms) may distribute the Bidding Documents, or make them available for examination. Those prospective bidders that obtain an electronic (digital) copy of the Bidding Documents from a plan room are encouraged to register as plan holders from the Bidding Documents Website or Issuing Office. Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms, or for a Bidder's failure to obtain Addenda from a plan room.

2.06 *Electronic Documents*

A. When the Bidding Requirements indicate that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to the Bidders as Electronic Documents in the manner specified.

B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in

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Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

3.01 Bidder is to submit the following information with its Bid to demonstrate Bidder's qualifications to perform the Work:

A. Written evidence establishing qualifications such as financial data, previous experience, and present commitments.

B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.

C. Bidder's state or other contractor license number, if applicable.

D. Subcontractor and Supplier qualification information.

E. Other required information regarding qualifications.

3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

ARTICLE 4—PRE-BID CONFERENCE

4.01 A non-mandatory pre-bid conference will be held at the time and location indicated in the Advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference; however, attendance at this conference is not required to submit a Bid.

4.02 Information presented at the pre-Bid conference does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the pre-Bid conference. Information presented and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.

ARTICLE 5—SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

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5.02 *Existing Site Conditions*

A. *Subsurface and Physical Conditions; Hazardous Environmental Conditions*

1. The Supplementary Conditions identify the following regarding existing conditions at or adjacent to the Site:

a. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data.

b. Those drawings known to Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data.

c. Reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.

d. Technical Data contained in such reports and drawings.

2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

4. *Geotechnical Baseline Report/Geotechnical Data Report:* N/A

B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05 of the General Conditions, and not in the drawings referred to in Paragraph 5.02.A of these Instructions to Bidders. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

5.03 *Other Site-related Documents*

A. No other Site-related documents are available.

5.04 *Site Visit and Testing by Bidders*

A. Bidder are recommended to visit the Site and conduct a thorough visual examination of the Site and adjacent areas. During the visit the Bidder must not disturb any ongoing operations at the Site.

B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.

C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such

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access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site. Bidder is responsible for establishing access needed to reach specific selected test sites.

D. Bidder must comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

E. Bidder must fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

5.05 *Owner's Safety Program*

A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be noted in the Supplementary Conditions.

5.06 *Other Work at the Site*

A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Express Representations and Certifications in Bid Form, Agreement*

A. The Bid Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications, and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.

B. If Bidder is awarded the Contract, Bidder (as Contractor) will make similar express representations and certifications when it executes the Agreement.

ARTICLE 7—INTERPRETATIONS AND ADDENDA

7.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.

7.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:

A. **Isabella Tibbets at itibbets@trekkdesigngroup.com**

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7.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for opening of Bids may not be answered.

7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8—BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **5** percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions. Such Bid bond will be issued in the form included in the Bidding Documents.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, furnished the required Contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited, in whole in the case of a penal sum bid bond, and to the extent of Owner's damages in the case of a damages-form bond. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within 7 days after the Bid opening.

ARTICLE 9—CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any) are to be achieved, are set forth in the Agreement.

9.02 Bidder must set forth in the Bid the time by which Bidder must achieve Substantial Completion, subject to the restrictions established in Paragraph 13.07 of these Instructions. The Owner will take Bidder's time commitment regarding Substantial Completion into consideration during the evaluation of Bids, and it will be necessary for the apparent Successful Bidder to satisfy Owner that it will be able to achieve Substantial Completion within the time such Bidder has designated in the Bid. The Successful Bidder's time commitments will be entered into the Agreement or incorporated in the Agreement by reference to the specific terms of the Bid.

9.03 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

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ARTICLE 10—SUBSTITUTE AND "OR EQUAL" ITEMS

10.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.

10.02 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer within 10 days of the issuance of the Advertisement for Bids or invitation to Bidders. Each such request must comply with the requirements of Paragraphs 7.05 and 7.06 of the General Conditions, and the review of the request will be governed by the principles in those paragraphs. The burden of proof of the merit of the proposed item is upon Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all registered Bidders. Bidders cannot rely upon approvals made in any other manner.

10.03 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

11.01 A Bidder must be prepared to retain specific Subcontractors and Suppliers for the performance of the Work if required to do so by the Bidding Documents or in the Specifications. If a prospective Bidder objects to retaining any such Subcontractor or Supplier and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

11.02 The apparent Successful Bidder, and any other Bidder so requested, must submit to Owner a list of the Subcontractors or Suppliers proposed for the Work within five days after Bid opening.

11.03 If requested by Owner, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor or Supplier. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

11.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor or Supplier, so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable

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to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.07 of the General Conditions.

ARTICLE 12—PREPARATION OF BID

12.01 The Bid Form is included with the Bidding Documents.

A. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.

B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."

12.02 If Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder shall prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8½ inch by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.

12.03 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.

12.04 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership must be shown.

12.05 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.

12.06 A Bid by an individual must show the Bidder's name and official address.

12.07 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.

12.08 All names must be printed in ink below the signatures.

12.09 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.

12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.

12.11 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.

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12.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids and attach such certification to the Bid. Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13—BASIS OF BID

13.01 *Unit Price*

A. Bidders must submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.

B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity", which Owner or its representative has set forth in the Bid Form, for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.

C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

ARTICLE 14—SUBMITTAL OF BID

14.01 The Bidding Documents include one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 2 of the Bid Form.

14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, the name and address of Bidder, and must be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid must be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid must be addressed to the location designated in the Advertisement.

14.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 15—MODIFICATION AND WITHDRAWAL OF BID

15.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted

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prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.

15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 16—OPENING OF BIDS

16.01 Bids will be opened at the time and place indicated in the advertisement to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

18.01 The items listed in the bid schedule are divided between three sections. Each section may be awarded separately to the lowest responsive, responsible bidders for that specific section. This contract will be awarded to the lowest responsive, responsible bidder for each section of the bid schedule. Award of contract shall be based upon available funding at the sole discretion of the City.

18.02 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.

18.03 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible.

18.04 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.

18.05 If Owner awards the contract for the Work, such award will be to the responsible Bidder submitting the lowest responsive Bid.

18.06 *Evaluation of Bids*

A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

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B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form. To determine the Bid prices for purposes of comparison, Owner will announce to all bidders a "Base Bid plus alternates" budget after receiving all Bids, but prior to opening them. For comparison purposes alternates will be accepted, following the order of priority established in the Bid Form, until doing so would cause the budget to be exceeded. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on its base Bid and any combination of its additive alternate Bids for which Owner determines funds will be available at the time of award.

C. For determination of the apparent low Bidder(s) when sectional bids are submitted, Bids will be compared on the basis of the aggregate of the Bids for separate sections and the Bids for combined sections that result in the lowest total amount for all of the Work.

D. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

E. Bid prices will be compared after adjusting for differences in time of Substantial Completion (total number of calendar days to substantially complete the Work) designated by Bidders. The adjusting amount will be determined at the rate set forth in the Agreement for liquidated damages for failing to achieve Substantial Completion, or such other amount that Owner has designated in the Bid Form.

1. The method for calculating the lowest bid for comparison will be the summation of the Bid price shown in the Bid Form plus the product of the Bidder-specified time of Substantial Completion in calendar days times the rate for liquidated damages in dollars per day.

2. This procedure is only used to determine the lowest bid for comparison and contractor selection purposes. The Contract Price for compensation and payment purposes remains the Bid price shown in the Bid Form.

18.07 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

18.08 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 19—BONDS AND INSURANCE

19.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds, other required bonds (if any),

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and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by required bonds and insurance documentation.

19.02 Article 8, Bid Security, of these Instructions, addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

20.01 When Owner issues a Notice of Award to the Successful Bidder, it will be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder must execute and deliver the required number of counterparts of the Agreement and any bonds and insurance documentation required to be delivered by the Contract Documents to Owner. Within 10 days thereafter, Owner will deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 21—SALES AND USE TAXES

21.01 Owner is exempt from Missouri state sales and use taxes on materials and equipment to be incorporated in the Work. Said taxes must not be included in the Bid. Refer to Paragraph SC-7.10 of the Supplementary Conditions for additional information.

ARTICLE 22—PURCHASE ORDERS AND CONTRACT RENEWAL

22.01 The City reserves the option of using the pricing quoted, using the procedures described in the technical specifications for other sewer rehabilitation as needed, for duration of one - twelve (12) month period beginning upon award of this contract. Each purchase order will require separate annual wage rate compliance, performance, labor and material bonds, as well as insurance coverage. Pricing quoted herein shall remain firm for the first twelve (12) month period based on the specifications described herein.

22.02 The City reserves the right to negotiate this contract for additional one-year renewal periods after completion of the initial contract. Adjustment in cost at the beginning of each renewal period will be limited to the current Federal Consumer Price (CPI-U, All Items) Urban Consumers Index CPI rate. If the Contractor requests an increase in compensation for a renewal period, the Contractor shall notify the City no less than sixty (60) days prior to the end of the contract period and shall provide evidence to the satisfaction of the City of the increased costs incurred by the Contractor for any element of the contract for which an increase is thereby requested.

22.03 The City shall notify the Contractor in writing of the intent to exercise the renewal option. However, failure to notify the Contractor does not waive the City's right to exercise the renewal option.

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BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to: TREKK Design Group, LLC at 1955 E Phelps Street, Springfield, MO 65802

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security;

B. List of Proposed Subcontractors;

C. List of Proposed Suppliers;

D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;

E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;

F. Required Bidder Qualification Statement with supporting data.

ARTICLE 3—BASIS OF BID UNIT PRICES

3.01 Unit Price Bids

The proposed work, hereinafter called the work, includes:

Providing all labor, materials, tools and equipment necessary for the sanitary sewer collection system improvements through rehabilitation methods. The unit prices submitted are to be utilized by the City of Monett in order to execute future purchase orders. The City of Monett intends to initially focus purchase orders with rehabilitation efforts in the southeast section of Basin C. Purchase orders may include work anywhere within the City of Monett's collection system. See Attachment A – City of Monett, Missouri - Sanitary Sewer Collection System Basin Map.

The quantities within the bid schedule are only to establish low bidders for each section and do not represent anticipated quantities and are not purchased hereby, nor is the City obligated in any way to purchase the quantities shown. The intent of the bid schedule is to establish unit prices from the low bidders in each section to be used in future purchase orders. The right is reserved to exceed or diminish these quantities in future purchase orders or to omit any one or more items

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if desired. The items listed in the bid schedule are split into four sections. Each section may be awarded separately to the lowest responsive, responsible bidder for that specific section.

A. Bidder will perform the following Work at the indicated unit prices:

Section 1: Cured-In-Place-Pipe (CIPP) Lining Rehabilitation					
Item Number	**Item Description**	**Unit**	**Quantity**	**Unit Price**	**Extension**
1	Mobilization for CIPP Lining (Per Purchase Order)	LS	1	$	$
2	Mobilization for CCTV Inspection and Cleaning (Per Purchase Order)	LS	1	$	$
3	Bypass Pumping - Up to 1000 Gallons Per Minute (Per Set Up Per Day)	EA	1	$	$
4	6" Diameter (6.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
5	6" Diameter (6.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
6	6" Diameter (6.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
7	8" Diameter (6.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
8	8" Diameter (6.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
9	8" Diameter (6.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
10	12" Diameter (6.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
11	12" Diameter (6.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
12	12" Diameter (6.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
13	15" Diameter (6.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
14	15" Diameter (6.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
15	15" Diameter (6.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
16	18" Diameter (7.5mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
17	18" Diameter (7.5mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
18	18" Diameter (7.5mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
19	21" Diameter (9.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
20	21" Diameter (9.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
21	21" Diameter (9.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
22	24" Diameter (9.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
23	24" Diameter (9.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
24	24" Diameter (9.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
25	8" Diameter (7.5mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
26	8" Diameter (7.5mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
27	8" Diameter (7.5mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
28	12" Diameter (7.5mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
29	12" Diameter (7.5mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
30	12" Diameter (7.5mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
31	15" Diameter (7.5mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
32	15" Diameter (7.5mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
33	15" Diameter (7.5mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
34	18" Diameter (9.0mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
35	18" Diameter (9.0mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$

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36	18" Diameter (9.0mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
37	21" Diameter (10.5mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
38	21" Diameter (10.5mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
39	21" Diameter (10.5mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
40	24" Diameter (10.5mm CIPP) - Work Orders 1 LF to 500 LF	LF	250	$	$
41	24" Diameter (10.5mm CIPP) - Work Orders 500 LF to 1,000 LF	LF	750	$	$
42	24" Diameter (10.5mm CIPP) - Work Orders > 1,000 LF	LF	1,250	$	$
43	6" to 12" Diameter Light Cleaning and CCTV Inspection - Work Orders 1 to 10,000 LF	LF	5,000	$	$
44	6" to 12" Diameter Light Cleaning and CCTV Inspection - Work Orders > 10,000 LF	LF	12,500	$	$
45	6" to 12" Diameter Heavy Cleaning and CCTV Inspection - Work Orders 1 to 10,000 LF	LF	5,000	$	$
46	6" to 12" Diameter Heavy Cleaning and CCTV Inspection – Work Orders > 10,000 LF	LF	12,500	$	$
47	15" to 18" Diameter Light Cleaning and CCTV Inspection - Work Orders 1 to 10,000 LF	LF	5,000	$	$
48	15" to 18" Diameter Light Cleaning and CCTV Inspection – Work Orders > 10,000 LF	LF	12,500	$	$
49	15" to 18" Diameter Heavy Cleaning and CCTV Inspection - Work Orders 1 to 10,000 LF	LF	5,000	$	$
50	15" to 18" Diameter Heavy Cleaning and CCTV Inspection – Work Orders > 10,000 LF	LF	12,500	$	$
51	21" to 24" Diameter Light Cleaning and CCTV Inspection - Work Orders 1 to 10,000 LF	LF	5,000	$	$
52	21" to 24" Diameter Light Cleaning and CCTV Inspection - Work Orders > 10,000 LF	LF	12,500	$	$
53	21" to 24" Diameter Heavy Cleaning and CCTV Inspection - Work Orders 1 to 10,000 LF	LF	5,000	$	$
54	21" to 24" Diameter Heavy Cleaning and CCTV Inspection - Work Orders > 10,000 LF	LF	12,500	$	$
				TOTAL BID AMOUNT - SECTION 1	**$**

Section 2: Service Lateral Connection Repair (LCR)					
Item Number	**Item Description**	**Unit**	**Quantity**	**Unit Price**	**Extension**
1	Mobilization for Service Lateral Connection Repair (Per Purchase Order)	LS	1	$	$
2	Bypass Pumping - Up to 1000 Gallons Per Minute	EA	1	$	$
3	Lateral Launch CCTV Inspection and Cleaning	EA	1	$	$
4	LCR - 8" to 12" Diameter Main, 4" to 6" Diameter Lateral Up to 24" Liner	EA	1	$	$
5	LCR - 15" to 21" Diameter Main, 4" to 6" Diameter Lateral Up to 24" Liner	EA	1	$	$
6	Lateral Liner and LCR on 8" to 12" Diameter Main, 4" to 6" Diameter Lateral Up to 5' Liner	EA	1	$	$
7	Lateral Liner and LCR on 15" to 21" Diameter Main, 4" to 6" Diameter Lateral Up to 5' Liner	EA	1	$	$
8	Lateral Line Terminating in Manhole, 4" to 6" Diameter Up to 5' Liner	EA	1	$	$
				TOTAL BID AMOUNT - SECTION 2	**$**

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Section 3: Open Cut Point Repairs on Mainlines and Tap Connections					
Item Number	**Item Description**	**Unit**	**Quantity**	**Unit Price**	**Extension**
1	Mobilization for Point Repairs (Per Purchase Order)	LS	1	$	$
2	Open Cut Point Repair on 8" to 12" Diameter Main - 0 LF to 5 LF (up to 10 foot depth)	EA	1	$	$
3	Open Cut Point Repair on 8" to 12" Diameter Main - 0 LF to 5 LF (10 to 15 foot depth)	EA	1	$	$
4	Open Cut Point Repair on 8" to 12" Diameter Main - 0 LF to 5 LF (15 to 20 foot depth)	EA	1	$	$
5	Open Cut Point Repair on 8" to 12" Diameter Main - 5 LF to 10 LF (up to 10 foot depth)	EA	1	$	$
6	Open Cut Point Repair on 8" to 12" Diameter Main - 5 LF to 10 LF (10 to 15 foot depth)	EA	1	$	$
7	Open Cut Point Repair on 8" to 12" Diameter Main - 5 LF to 10 LF (15 to 20 foot depth)	EA	1	$	$
8	Open Cut Point Repair on 8" to 12" Diameter Main - 10 LF to 15 LF (up to 10 foot depth)	EA	1	$	$
9	Open Cut Point Repair on 8" to 12" Diameter Main - 10 LF to 15 LF (10 to 15 foot depth)	EA	1	$	$
10	Open Cut Point Repair on 8" to 12" Diameter Main - 10 LF to 15 LF (15 to 20 foot depth)	EA	1	$	$
11	Open Cut Point Repair on 8" to 12" Diameter Main - 15 LF to 20 LF (up to 10 foot depth)	EA	1	$	$
12	Open Cut Point Repair on 8" to 12" Diameter Main - 15 LF to 20 LF (10 to 15 foot depth)	EA	1	$	$
13	Open Cut Point Repair on 8" to 12" Diameter Main - 15 LF to 20 LF (15 to 20 foot depth)	EA	1	$	$
14	Open Cut Point Repair on 15" to 18" Diameter Main - 0 LF to 5 LF (up to 10 foot depth)	EA	1	$	$
15	Open Cut Point Repair on 15" to 18" Diameter Main - 0 LF to 5 LF (10 to 15 foot depth)	EA	1	$	$
16	Open Cut Point Repair on 15" to 18" Diameter Main - 0 LF to 5 LF (15 to 20 foot depth)	EA	1	$	$
17	Open Cut Point Repair on 15" to 18" Diameter Main - 5 LF to 10 LF (up to 10 foot depth)	EA	1	$	$
18	Open Cut Point Repair on 15" to 18" Diameter Main - 5 LF to 10 LF (10 to 15 foot depth)	EA	1	$	$
19	Open Cut Point Repair on 15" to 18" Diameter Main - 5 LF to 10 LF (15 to 20 foot depth)	EA	1	$	$
20	Open Cut Point Repair on 15" to 18" Diameter Main - 10 LF to 15 LF (up to 10 foot depth)	EA	1	$	$
21	Open Cut Point Repair on 15" to 18" Diameter Main - 10 LF to 15 LF (10 to 15 foot depth)	EA	1	$	$
22	Open Cut Point Repair on 15" to 18" Diameter Main - 10 LF to 15 LF (15 to 20 foot depth)	EA	1	$	$
23	Open Cut Point Repair on 15" to 18" Diameter Main - 15 LF to 20 LF (up to 10 foot depth)	EA	1	$	$
24	Open Cut Point Repair on 15" to 18" Diameter Main - 15 LF to 20 LF (10 to 15 foot depth)	EA	1	$	$
25	Open Cut Point Repair on 15" to 18" Diameter Main - 15 LF to 20 LF (15 to 20 foot depth)	EA	1	$	$
26	Open Cut Point Repair on 21" to 24" Diameter Main - 0 LF to 5 LF (up to 10 foot depth)	EA	1	$	$

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27	Open Cut Point Repair on 21" to 24" Diameter Main - 0 LF to 5 LF (10 to 15 foot depth)	EA	1	$	$
28	Open Cut Point Repair on 21" to 24" Diameter Main - 0 LF to 5 LF (15 to 20 foot depth)	EA	1	$	$
29	Open Cut Point Repair on 21" to 24" Diameter Main - 5 LF to 10 LF (up to 10 foot depth)	EA	1	$	$
30	Open Cut Point Repair on 21" to 24" Diameter Main - 5 LF to 10 LF (10 to 15 foot depth)	EA	1	$	$
31	Open Cut Point Repair on 21" to 24" Diameter Main - 5 LF to 10 LF (15 to 20 foot depth)	EA	1	$	$
32	Open Cut Point Repair on 21" to 24" Diameter Main - 10 LF to 15 LF (up to 10 foot depth)	EA	1	$	$
33	Open Cut Point Repair on 21" to 24" Diameter Main - 10 LF to 15 LF (10 to 15 foot depth)	EA	1	$	$
34	Open Cut Point Repair on 21" to 24" Diameter Main - 10 LF to 15 LF (15 to 20 foot depth)	EA	1	$	$
35	Open Cut Point Repair on 21" to 24" Diameter Main - 15 LF to 20 LF (up to 10 foot depth)	EA	1	$	$
36	Open Cut Point Repair on 21" to 24" Diameter Main - 15 LF to 20 LF (10 to 15 foot depth)	EA	1	$	$
37	Open Cut Point Repair on 21" to 24" Diameter Main - 15 LF to 20 LF (15 to 20 foot depth)	EA	1	$	$
38	Service Connection on Open Cut Point Repair	EA	1	$	$
				TOTAL BID AMOUNT - SECTION 3	**$**

Section 4: Sanitary Sewer Smoke Testing					
Item Number	**Item Description**	**Unit**	**Quantity**	**Unit Price**	**Extension**
1	Mobilization for Smoke Testing (Per Purchase Order)	LS	1	$	$
2	Smoke Testing, Work Orders - 0 LF to 20,000 LF	LF	20,000	$	$
3	Smoke Testing, Work Orders - 20,001 LF to 50,000 LF	LF	35,000	$	$
4	Smoke Testing, Work Orders - 50,001 LF to 100,000 LF	LF	75,000	$	$
5	Smoke Testing, Work Orders - >100,000 LF	LF	150,000	$	$
				TOTAL BID AMOUNT - SECTION 4	**$**

B. Bidder acknowledges that:

1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and

2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

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3.02 *Total Bid Price (Unit Prices)*

Total Bid Price – Section 1 (Total of all Unit Price Bids)	$
Total Bid Price – Section 2 (Total of all Unit Price Bids)	$
Total Bid Price – Section 3 (Total of all Unit Price Bids)	$
Total Bid Price – Section 4 (Total of all Unit Price Bids)	$

ARTICLE 4— TIME OF COMPLETION

4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

4.02 Bidder agrees that the Work will be substantially complete within **305** calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **365** calendar days after the date when the Contract Times commence to run.

4.03 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 *Bid Acceptance Period*

A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder's Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

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3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.

4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.

5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.

6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.

7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.

3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

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4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:

    a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.

    b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.

    c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.

    d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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BIDDER hereby submits this Bid as set forth above:

Bidder:

_____

(typed or printed name of organization)

By: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

Address for giving notices:

_____

_____

Bidder's Contact:

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Phone: _____

Email: _____

Address:

_____

_____

_____

Bidder's Contractor License No.: (if applicable) _____

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BID BOND (PENAL SUM FORM)

Bidder Name: **[Full formal name of Bidder]** Address *(principal place of business)*: **[Address of Bidder's principal place of business]**	**Surety** Name: **[Full formal name of Surety]** Address *(principal place of business)*: **[Address of Surety's principal place of business]**
Owner Name: **City of Monett** Address *(principal place of business)*: **217 5th Street, Monett, MO 65708**	**Bid** Project *(name and location)*: **City of Monett, Missouri – Sanitary Sewer Collection System Rehabilitation Improvements** Bid Due Date: **July 2nd, 2026**
Bond Penal Sum: **[Amount]** Date of Bond: **[Date]**	

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

Bidder	Surety
_____ *(Full formal name of Bidder)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature) (Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title:	Title:

Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.

EJCDC® C-430, Bid Bond (Penal Sum Form).
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1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
    3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
    3.2. All Bids are rejected by Owner, or
    3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

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BIDDER QUALIFICATIONS

ARTICLE 1—GENERAL INFORMATION

1.01 Provide contact information for the Business:

Legal Name of Business:			
Corporate Office			
Name:		Phone number:	
Title:		Email address:	
Business address of corporate office:			
Local Office			
Name:		Phone number:	
Title:		Email address:	
Business address of local office:			

1.02 Provide information on the Business's organizational structure:

Form of Business:	☐ Sole Proprietorship ☐ Partnership ☐ Corporation		
☐ Limited Liability Company ☐ Joint Venture comprised of the following companies:			
	1.		
	2.		
	3.		
Provide a separate Qualification Statement for each Joint Venturer.			
Date Business was formed:		State in which Business was formed:	
Is this Business authorized to operate in the Project location?	☐ Yes ☐ No ☐ Pending		

1.03 Identify all businesses that own Business in whole or in part (25% or greater), or that are wholly or partly (25% or greater) owned by Business:

Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			

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BIDDER QUALIFICATIONS

1.04 Provide information regarding the Business's officers, partners, and limits of authority.

Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	$
Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	$
Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	$
Name:		Title:	

ARTICLE 2—LICENSING

2.01 Provide information regarding licensure for Business:

Name of License:			
Licensing Agency:			
License No:		Expiration Date:	
Name of License:			
Licensing Agency:			
License No:		Expiration Date:	

ARTICLE 3—DIVERSE BUSINESS CERTIFICATIONS

3.01 Provide information regarding Business's Diverse Business Certification, if any. Provide evidence of current certification.

Certification	Certifying Agency	Certification Date
☐ Disadvantaged Business Enterprise		
☐ Minority Business Enterprise		
☐ Woman-Owned Business Enterprise		
☐ Small Business Enterprise		
☐ Disabled Business Enterprise		
☐ Veteran-Owned Business Enterprise		
☐ Service-Disabled Veteran-Owned Business		
☐ HUBZone Business (Historically Underutilized) Business		
☐ Other		
☐ None		

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BIDDER QUALIFICATIONS

ARTICLE 4—SAFETY

4.01 Provide information regarding Business's safety organization and safety performance.

Name of Business's Safety Officer:		
Safety Certifications		
Certification Name	Issuing Agency	Expiration

4.02 Provide Worker's Compensation Insurance Experience Modification Rate (EMR), Total Recordable Frequency Rate (TRFR) for incidents, and Total Number of Recorded Manhours (MH) for the last 3 years and the EMR, TRFR, and MH history for the last 3 years of any proposed Subcontractor(s) that will provide Work valued at 10% or more of the Contract Price. Provide documentation of the EMR history for Business and Subcontractor(s).

Year									
Company	EMR	TRFR	MH	EMR	TRFR	MH	EMR	TRFR	MH

ARTICLE 5—FINANCIAL

5.01 Provide information regarding the Business's financial stability. Provide the most recent audited financial statement, and if such audited financial statement is not current, also provide the most current financial statement.

Financial Institution:		
Business address:		
Date of Business's most recent financial statement:		☐ Attached
Date of Business's most recent audited financial statement:		☐ Attached
Financial indicators from the most recent financial statement		
Contractor's Current Ratio (Current Assets ÷ Current Liabilities)		
Contractor's Quick Ratio ((Cash and Cash Equivalents + Accounts Receivable + Short Term Investments) ÷ Current Liabilities)		

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BIDDER QUALIFICATIONS

ARTICLE 6—SURETY INFORMATION

6.01 Provide information regarding the surety company that will issue required bonds on behalf of the Business, including but not limited to performance and payment bonds.

Surety Name:			
Surety is a corporation organized and existing under the laws of the state of:			
Is surety authorized to provide surety bonds in the Project location?	☐ Yes ☐ No		
Is surety listed in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" published in Department Circular 570 (as amended) by the Bureau of the Fiscal Service, U.S. Department of the Treasury? ☐ Yes ☐ No			
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

ARTICLE 7—INSURANCE

7.01 Provide information regarding Business's insurance company(s), including but not limited to its Commercial General Liability carrier. Provide information for each provider.

Name of insurance provider, and type of policy (CLE, auto, etc.):			
Insurance Provider		Type of Policy (Coverage Provided)	
Are providers licensed or authorized to issue policies in the Project location?		☐ Yes ☐ No	
Does provider have an A.M. Best Rating of A-VII or better?		☐ Yes ☐ No	
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

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BIDDER QUALIFICATIONS

ARTICLE 8—CONSTRUCTION EXPERIENCE

8.01 Provide information that will identify the overall size and capacity of the Business.

Average number of current full-time employees:	
Estimate of revenue for the current year:	
Estimate of revenue for the previous year:	

8.02 Provide information regarding the Business's previous contracting experience.

Years of experience with projects like the proposed project:				
As a general contractor:		As a joint venturer:		
Has Business, or a predecessor in interest, or an affiliate identified in Paragraph 1.03:				
Been disqualified as a bidder by any local, state, or federal agency within the last 5 years? ☐ Yes ☐ No				
Been barred from contracting by any local, state, or federal agency within the last 5 years? ☐ Yes ☐ No				
Been released from a bid in the past 5 years? ☐ Yes ☐ No				
Defaulted on a project or failed to complete any contract awarded to it? ☐ Yes ☐ No				
Refused to construct or refused to provide materials defined in the contract documents or in a change order? ☐ Yes ☐ No				
Been a party to any currently pending litigation or arbitration? ☐ Yes ☐ No				
Provide full details in a separate attachment if the response to any of these questions is Yes.				

8.03 List all projects currently under contract in Schedule A and provide indicated information.

8.04 List a minimum of three and a maximum of six projects completed in the last 5 years in Schedule B and provide indicated information to demonstrate the Business's experience with projects similar in type and cost of construction.

8.05 In Schedule C, provide information on key individuals whom Business intends to assign to the Project. Provide resumes for those individuals included in Schedule C. Key individuals include the Project Manager, Project Superintendent, Quality Manager, and Safety Manager. Resumes may be provided for Business's key leaders as well.

ARTICLE 9—REQUIRED ATTACHMENTS

9.01 Provide the following information with the Statement of Qualifications:

A. If Business is a Joint Venture, separate Qualifications Statements for each Joint Venturer, as required in Paragraph 1.02.

B. Diverse Business Certifications if required by Paragraph 3.01.

C. Certification of Business's safety performance if required by Paragraph 4.02.

D. Financial statements as required by Paragraph 5.01.

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E. Attachments providing additional information as required by Paragraph 8.02.

F. Schedule A (Current Projects) as required by Paragraph 8.03.

G. Schedule B (Previous Experience with Similar Projects) as required by Paragraph 8.04.

H. Schedule C (Key Individuals) and resumes for the key individuals listed, as required by Paragraph 8.05.

I. Additional items as pertinent.

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BIDDER QUALIFICATIONS

This Statement of Qualifications is offered by:

Business: _____
(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(date signed)

(If Business is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:

_____

_____

_____

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

_____

_____

_____

Phone: _____

Email: _____

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BIDDER QUALIFICATIONS

Schedule A—Current Projects

Name of Organization				
Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					

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Construction Manager					

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BIDDER QUALIFICATIONS

Schedule B—Previous Experience with Similar Projects

Name of Organization				
Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					

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Construction Manager					

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BIDDER QUALIFICATIONS

Schedule B—Previous Experience with Similar Projects

Name of Organization				
Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner		Project Name		
General Description of Project				
Project Cost		Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager
Name				

Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)

	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					

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Construction Manager					

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BIDDER QUALIFICATIONS

Schedule C—Key Individuals

Project Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Project Superintendent			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

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BIDDER QUALIFICATIONS

Safety Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Quality Control Manager			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

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AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between **The City of Monett** ("Owner") and **[name of contracting entity]** ("Contractor").

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: Providing all labor, materials, tools and equipment necessary for the rehabilitation of wastewater collection system components.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows:

ARTICLE 3—ENGINEER

3.01 The Owner has retained TREKK Design Group ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

A. The Work will be substantially complete within 305 days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **365** days after the date when the Contract Times commence to run.

4.02 Period of Agreement

A. This agreement shall remain in effect for 1 year from the date of the signed agreement. This agreement may be renewed for one-year renewal periods thereafter, with a maximum of four (4) renewal periods. If the Contractor agrees to renewal periods, the right to exercise these terms shall be the option of the Owner. The City shall give the awarded bidder notice in writing to commence work at the unit prices included and as outlines in the established purchase orders issued by the City, and the same shall be completed in a set duration as set forth in each individual purchase order issued by the City. Work for each purchase order shall

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be diligently prosecuted at such rate and in such manner as, in the judgement of the engineer, is necessary for the completion of the work described herein.

4.03 *Milestones*

A. N/A

4.04 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. *Substantial Completion:* Contractor shall pay Owner $**500** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.

2. *Completion of Remaining Work:* After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner $**500** for each day that expires after such time until the Work is completed and ready for final payment.

3. *Milestones:* N/A

4. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.

B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

4.05 *Special Damages*

A. Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.

B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

C. The special damages imposed in this paragraph are supplemental to any liquidated damages for delayed completion established in this Agreement.

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ARTICLE 5—CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with future purchase orders, based on the unit price amounts that follow, subject to adjustment under the Contract.

A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

B. Total of Unit Price Work (subject to final Unit Price adjustment) $**[number]**.

C. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the **15th** day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.

a. **95** percent of the value of the Work completed (with the balance being retainage).

b. **95** percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to **95** percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less **200** percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

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6.03 *Final Payment*

A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 *Interest*

A. All amounts not paid when due will bear interest at the rate of **5** percent per annum.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

A. The Contract Documents consist of all of the following:

1. This Agreement.
2. Instructions to Bidders for Construction Contract.
3. Bonds:
    a. Performance bond (together with power of attorney).
    b. Payment bond (together with power of attorney).
4. General Conditions.
5. Supplementary Conditions.
6. Specifications as listed in the table of contents of the project manual (copy of list attached).
7. Sanitary Sewer Basin Map (not attached but incorporated by reference) consisting of **1** sheet with each sheet bearing the following general title: **City of Monett, Missouri Sanitary Sewer Basin Map**
8. Addenda (numbers **[number]** to **[number]**, inclusive).
9. Exhibits to this Agreement (enumerated as follows):
    a. **Contractor's Bid (not attached but incorporated by reference) pages ____to ____.**
10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
    a. Notice to Proceed.
    b. Work Change Directives.
    c. Change Orders.
    d. Field Orders.
    e. Warranty Bond, if any.

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B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 7.

D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—COOPERATIVE PROCUREMENT WITH OTHER JURISDICTIONS

This contract is established as a cooperative purchasing contract, pursuant to Missouri State Statute RSMo Chapter 70, Section 70.220. While this section is optional, it is preferred and agreeing to extend this contact to other public entities will be given preference in the evaluation process. Though not a party to this contract, other public entities, state, city, county, and local governments bodies established on behalf of public entities may purchase the sewer rehabilitation services under this contract.

Any such participation shall be by separate agreement between the participating governmental entity and the Contractor. The Owner assumes no liability, responsibility, or obligation for any purchases, work orders, payment obligations, claims, or disputes arising from another entity's use of this contract. The Contractor agrees that additional work performed under this provision shall:

1. Be substantially similar in scope and character to the Work described in the contract documents;
2. Utilize the same or negotiated unit prices, subject to mutual agreed adjustments for quantities, mobilization, location, and project specific conditions;
3. Be subject to the same general terms and technical specifications unless otherwise modified in writing; and
4. Comply with all applicable Missouri procurement statutes and local procurement requirements.

Bidder agrees to extend the pricing associated with this contract to other Missouri (and bordering states) public entities. However, Contractor shall retain the right to contract with other entities to negotiate mobilization and/or travel costs in addition to the pricing stated herein, directly with other entities, in order to cover costs associated with working in areas remote to the City of Monett.

Bidder Agrees to Cooperative Procurement _____Yes _____No _____Bidder Initials

ARTICLE 9—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

9.01 *Contractor's Representations*

A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:

1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
2. Contractor has become familiar with the general, local, and site conditions that may affect cost, progress, and performance of the Work.

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3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.

6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

9.02 *Contractor's Certifications*

A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

EJCDC® C-520, Agreement between Owner and Contractor for Construction Contract (Stipulated Price).
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4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

9.03 *Standard General Conditions*

A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

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IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on **[indicate date on which Contract becomes effective]** (which is the Effective Date of the Contract).

Owner:	Contractor:
City of Monett *(typed or printed name of organization)*	_____ *(typed or printed name of organization)*
By: _____ *(individual's signature)*	By: _____ *(individual's signature)*
Date: _____ *(date signed)*	Date: _____ *(date signed)*
Name: _____ *(typed or printed)*	Name: _____ *(typed or printed)*
Title: _____ *(typed or printed)*	Title: _____ *(typed or printed)* *(If **[Type of Entity]** is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)*
Attest: _____ *(individual's signature)*	Attest: _____ *(individual's signature)*
Title: _____ *(typed or printed)*	Title: _____ *(typed or printed)*
Address for giving notices:	Address for giving notices:
Designated Representative:	Designated Representative:
Name: _____ *(typed or printed)*	Name: _____ *(typed or printed)*
Title: _____ *(typed or printed)*	Title: _____ *(typed or printed)*
Address:	Address:
Phone:	Phone:
Email:	Email:
*(If **[Type of Entity]** is a corporation, attach evidence of authority to sign. If **[Type of Entity]** is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)*	License No.: _____ *(where applicable)* State:

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NOTICE TO PROCEED

Owner:	City of Monett	Owner's Project No.:	
Engineer:	TREKK Design Group	Engineer's Project No.:	
Contractor:		Contractor's Project No.:	
Project:			
Contract Name:			
Effective Date of Contract:			

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on **[date Contract Times are to start]** pursuant to Paragraph 4.01 of the General Conditions.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work will be done at the Site prior to such date.

In accordance with the Agreement: **[Select one of the following two alternatives, insert dates or number of days, and delete the other alternative.]**

The number of days to achieve Substantial Completion is **305** days from the date stated above for the commencement of the Contract Times, resulting in a date for Substantial Completion of **[date, calculated from commencement date above]**; and the number of days to achieve readiness for final payment is **365 days** the commencement date of the Contract Times, resulting in a date for readiness for final payment of **[date, calculated from commencement date above]**.

Before starting any Work at the Site, Contractor must comply with the following:

[Note any access limitations, security procedures, or other restrictions]

Owner:	**City of Monett**
By *(signature)*:	
Name *(printed)*:	
Title:	
Date Issued:	

Copy: Engineer

EJCDC® C-550, Notice to Proceed.
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PERFORMANCE BOND

Contractor	**Surety**
Name:	Name: **[Full formal name of Surety]**
Address *(principal place of business)*:	Address *(principal place of business)*: **[Address of Surety's principal place of business]**
Owner	**Contract**
Name: **City of Monett**	Description *(name and location)*: **City of Monett, Missouri – Sanitary Sewer Collection System Rehabilitation Improvements**
Mailing address *(principal place of business)*: **217 5th Street, Monett, MO 65708**	Contract Price: **[Amount from Contract]**
	Effective Date of Contract: **[Date from Contract]**

Bond

Bond Amount: **[Amount]**

Date of Bond: **[Date]**

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

Contractor as Principal	Surety
_____	_____
(Full formal name of Contractor)	*(Full formal name of Surety) (corporate seal)*
By: _____	By: _____
(Signature)	*(Signature)(Attach Power of Attorney)*
Name: _____	Name: _____
(Printed or typed)	*(Printed or typed)*
Title: _____	Title: _____
Attest: _____	Attest: _____
(Signature)	*(Signature)*
Name: _____	Name: _____
(Printed or typed)	*(Printed or typed)*
Title: _____	Title: _____

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.

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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:

    3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;

    3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

    3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

    5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

    5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

    5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

    5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

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5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

   7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

   7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

   7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.

12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

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statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

    14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

    14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

    14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

    14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

    14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

16. Modifications to this Bond are as follows: **None**

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PAYMENT BOND

Contractor	**Surety**
Name: **[Full formal name of Contractor]** Address *(principal place of business)*: **[Address of Contractor's principal place of business]**	Name: **[Full formal name of Surety]** Address *(principal place of business)*: **[Address of Surety's principal place of business]**
Owner	**Contract**
Name: **City of Monett** Mailing address *(principal place of business)*: **217 5th Street, Monett, MO 65708**	Description *(name and location)*: **City of Monett, Missouri – Sanitary Sewer Collection System Rehabilitation Improvements** Contract Price: **[Amount, from Contract]** Effective Date of Contract: **[Date, from Contract]**

Bond

Bond Amount: **[Amount]**

Date of Bond: **[Date]**

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.

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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
    5.1. Claimants who do not have a direct contract with the Contractor
        5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
        5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
    5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
    7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
    7.2. Pay or arrange for payment of any undisputed amounts.
    7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

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8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.

9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

    16.1. *Claim*—A written statement by the Claimant including at a minimum:

        16.1.1. The name of the Claimant;

        16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;

        16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;

        16.1.4. A brief description of the labor, materials, or equipment furnished;

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16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;

16.1.7. The total amount of previous payments received by the Claimant; and

16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

18. Modifications to this Bond are as follows: **None**

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CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: City of Monett
Engineer: TREKK Design Group
Contractor:
Project:
Contract Name:

Owner's Project No.:
Engineer's Project No.:
Contractor's Project No.:

This ☐ Preliminary ☐ Final Certificate of Substantial Completion applies to:

☐ All Work ☐ The following specified portions of the Work:

[Describe the portion of the work for which Certificate of Substantial Completion is issued]

Date of Substantial Completion: **[Enter date, as determined by Engineer]**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work must be as provided in the Contract, except as amended as follows:

Amendments to Owner's Responsibilities: ☐ None ☐ As follows:

[List amendments to Owner's Responsibilities]

Amendments to Contractor's Responsibilities: ☐ None ☐ As follows:

[List amendments to Contractor's Responsibilities]

The following documents are attached to and made a part of this Certificate:

[List attachments such as punch list; other documents]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Engineer

By *(signature)*: _____

Name *(printed)*: _____

Title: _____

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NOTICE OF ACCEPTABILITY OF WORK

Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
Notice Date:	Effective Date of the Construction Contract:

The Engineer hereby gives notice to the Owner and Contractor that Engineer recommends final payment to Contractor, and that the Work furnished and performed by Contractor under the Construction Contract is acceptable, expressly subject to the provisions of the Construction Contract's Contract Documents ("Contract Documents") and of the Agreement between Owner and Engineer for Professional Services dated **[date of professional services agreement]** ("Owner-Engineer Agreement"). This Notice of Acceptability of Work (Notice) is made expressly subject to the following terms and conditions to which all who receive and rely on said Notice agree:

1. This Notice has been prepared with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the Engineer's professional opinion.
3. This Notice has been prepared to the best of Engineer's knowledge, information, and belief as of the Notice Date.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's Work) under the Owner-Engineer Agreement, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Owner-Engineer Agreement.
5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract, an acceptance of Work that is not in accordance with the Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents, or to otherwise comply with the Contract Documents or the terms of any special guarantees specified therein.
6. This Notice does not relieve Contractor of any surviving obligations under the Construction Contract, and is subject to Owner's reservations of rights with respect to completion and final payment.

Engineer

By *(signature)*: _____

Name *(printed)*: _____

Title: _____

EJCDC® C-626, Notice of Acceptability of Work.
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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

5. *Bidder*—An individual or entity that submits a Bid to Owner.

6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.

7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.

8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.

9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*

a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

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requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.

b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.

c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.

d. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.

13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.

14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.

15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.

16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.

17. *Cost of the Work*—See Paragraph 13.01 for definition.

18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.

19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.

20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.

21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

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recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.

23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.

24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.

    a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.

    b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.

    c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.

25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.

28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.

29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.

31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.

32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

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33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.

34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.

36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.

39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.

41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.

42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

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43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.

44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.

45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.

46. *Technical Data*

    a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.

    b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.

    c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.

47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.

48. *Unit Price Work*—Work to be paid for on the basis of unit prices.

49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

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1.02 *Terminology*

A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. *Day*: The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*: The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

1. does not conform to the Contract Documents;

2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

3. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).

E. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.

4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

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F. *Contract Price or Contract Times*: References to a change in "Contract Price or Contract Times" or "Contract Times or Contract Price" or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term "or both" is not expressed.

G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).

B. *Evidence of Contractor's Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.

C. *Evidence of Owner's Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.

B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

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into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.

B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.

C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

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ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.

C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.

D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.

E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

G. Nothing in the Contract Documents creates:

1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or

2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

A. *Standards Specifications, Codes, Laws and Regulations*

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

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inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements*: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents*: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:

a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

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B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

A. Contractor and its Subcontractors and Suppliers shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

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established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.

B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.

B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.

C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;

2. Abnormal weather conditions;

3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and

4. Acts of war or terrorism.

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D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:

1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.

2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.

3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.

E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:

1. The circumstances that form the basis for the requested adjustment;

2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;

3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;

4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and

5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.

G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

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B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.

C. *Cleaning*: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

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and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading of Structures*: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;

2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and

3. Technical Data contained in such reports and drawings.

B. *Underground Facilities*: Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

C. *Reliance by Contractor on Technical Data*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

D. *Limitations of Other Data and Documents*: Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;

3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or

4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

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5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;

2. is of such a nature as to require a change in the Drawings or Specifications;

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. *Owner's Statement to Contractor Regarding Site Condition*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

D. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

E. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

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Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;

b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:

a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;

b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

c. Contractor failed to give the written notice required by Paragraph 5.04.A.

3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.

4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:

1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;

2. complying with applicable state and local utility damage prevention Laws and Regulations;

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3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;

4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and

5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.

B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.

C. *Engineer's Review*: Engineer will:

1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;

2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;

3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and

4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Owner's Statement to Contractor Regarding Underground Facility*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

E. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

F. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

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or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;

b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and

c. Contractor gave the notice required in Paragraph 5.05.B.

2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.

3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;

2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

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of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.

H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

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conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.

B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.

C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

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Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.

E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.

F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.

G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.

H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.

B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.

C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.

D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

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Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.

F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.

G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

H. Contractor shall require:

1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and

2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.

I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.

J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.

K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

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L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.

M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.

N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

A. *Required Insurance*: Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.

B. *General Provisions*: The policies of insurance required by this Paragraph 6.03 as supplemented must:

1. include at least the specific coverages required;

2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;

3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;

4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and

5. include all necessary endorsements to support the stated requirements.

C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:

1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;

2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;

3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

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4. not seek contribution from insurance maintained by the additional insured; and

5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.

B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.

C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.

D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.

E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

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Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.

1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.

C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.

D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

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6.06 *Receipt and Application of Property Insurance Proceeds*

A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

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B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.

C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

A. *Contractor's Request; Governing Criteria*: Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that the proposed item:

1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

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2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;

3) has a proven record of performance and availability of responsive service; and

4) is not objectionable to Owner.

b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.

B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.

C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.

E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.

1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

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3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:

    a. will certify that the proposed substitute item will:

        1) perform adequately the functions and achieve the results called for by the general design;

        2) be similar in substance to the item specified; and

        3) be suited to the same use as the item specified.

    b. will state:

        1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;

        2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

        3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

    c. will identify:

        1) all variations of the proposed substitute item from the item specified; and

        2) available engineering, sales, maintenance, repair, and replacement services.

    d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

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E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.

B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.

C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.

D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.

E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.

F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

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H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.

J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.

K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.

L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.

M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

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7.09 *Permits*

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.

C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

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7.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.

B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.

C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.

H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

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I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).

J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

1. Before submitting a Shop Drawing or Sample, Contractor shall:

a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

b. determine and verify:

1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;

2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;

c. confirm that the Submittal is complete with respect to all related data included in the Submittal.

2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

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3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. *Shop Drawings*

a. Contractor shall submit the number of copies required in the Specifications.

b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

a. Contractor shall submit the number of Samples required in the Specifications.

b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.

3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.

3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

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document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.

7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. *Resubmittal Procedures for Shop Drawings and Samples*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.

2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.

3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:

   a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.

   b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.

   c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

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d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.

2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03. 2.04, and 2.05.

F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.

B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:

1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and

2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.

C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:

1. Observations by Engineer;

2. Recommendation by Engineer or payment by Owner of any progress or final payment;

3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. Use or occupancy of the Work or any part thereof by Owner;

5. Any review and approval of a Shop Drawing or Sample submittal;

6. The issuance of a notice of acceptability by Engineer;

7. The end of the correction period established in Paragraph 15.08;

8. Any inspection, test, or approval by others; or

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9. Any correction of defective Work by Owner.

E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.

B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.

C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

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D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.

E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:

1. Checking for conformance with the requirements of this Paragraph 7.19;

2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and

3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.

F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.

G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.

C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.

D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

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E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:

1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;

2. An itemization of the specific matters to be covered by such authority and responsibility; and

3. The extent of such authority and responsibilities.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

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B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.

1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.

2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.

C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

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9.05 *Lands and Easements; Reports, Tests, and Drawings*

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

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ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.

B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

A. Engineer has the authority to reject Work in accordance with Article 14.

B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.

C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.

D. Engineer's authority as to changes in the Work is set forth in Article 11.

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E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

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ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.

C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders covering:

1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;

2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;

3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and

4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.

B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

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B. If Owner has issued a Work Change Directive and:

1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.

2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.

B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.

B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.

C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.

B. An adjustment in the Contract Price will be determined as follows:

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1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);

2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or

3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).

C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:

1. A mutually acceptable fixed fee; or

2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;

b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;

c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;

d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;

e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and

f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

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11.08 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.

B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

A. *Purpose and Content*: Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. *Submittal*: Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.

2. *Supporting Data*: The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.

    a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.

    b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

    The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review*: Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.

4. *Engineer's Full Review and Action on the Change Proposal*: Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

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Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.

C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:

1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;

2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;

3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and

4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.

B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

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and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.

D. *Mediation*

1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.

2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:

1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

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2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.

5. Other costs consisting of the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

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consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.

2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.

3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

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g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. The cost of purchasing, renting, or furnishing small tools and hand tools.

3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

6. Expenses incurred in preparing and advancing Claims.

7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:

a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.

b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:

1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.

2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.

2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

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Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 *Allowances*

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances*: Contractor agrees that:

1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.

C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

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thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:

a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.

2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.

3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

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D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:

1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;

2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;

3. by manufacturers of equipment furnished under the Contract Documents;

4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and

5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.

F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.

B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

C. *Notice of Defects*: Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.

D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

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losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.

C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.

2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

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or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *Applications for Payments*

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

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establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

   a. the Work has progressed to the point indicated;

   b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and

   c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

   a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or

   b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

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4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

    a. to supervise, direct, or control the Work;

    b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;

    c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;

    d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or

    e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.

6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:

    a. the Work is defective, requiring correction or replacement;

    b. the Contract Price has been reduced by Change Orders;

    c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

    d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

    e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:

    a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

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b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;

c. Contractor has failed to provide and maintain required bonds or insurance;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;

e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;

f. The Work is defective, requiring correction or replacement;

g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

h. The Contract Price has been reduced by Change Orders;

i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;

j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;

k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or

l. Other items entitle Owner to a set-off against the amount recommended.

2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

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submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

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significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.

2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.

2. The final Application for Payment must be accompanied (except as previously delivered) by:

   a. all documentation called for in the Contract Documents;

   b. consent of the surety, if any, to final payment;

   c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

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d. a list of all duly pending Change Proposals and Claims; and

e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Final Application and Recommendation of Payment*: If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Notice of Acceptability*: In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.

D. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.

E. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

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appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. correct the defective repairs to the Site or such adjacent areas;
2. correct such defective Work;
3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.

B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.

C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.

D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

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F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);

2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;

3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or

4. Contractor's repeated disregard of the authority of Owner or Engineer.

B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:

1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and

2. enforce the rights available to Owner under any applicable performance bond.

C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.

D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.

E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

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attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.

B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

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provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this article:

1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and

2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.

B. *Final Resolution of Disputes*: For any dispute subject to resolution under this article, Owner or Contractor may:

1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;

2. agree with the other party to submit the dispute to another dispute resolution process; or

3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:

1. in person, by a commercial courier service or otherwise, to the recipient's place of business;

2. by registered or certified mail, postage prepaid, to the recipient's place of business; or

3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

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18.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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EJCDC® C-800, Supplementary Conditions of the Construction Contract.
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Modified to include RD edits from RUS Bulletin 1780-26 (5/24/2023).

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, “Paragraph SC-4.05.”

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

SC 1.01 Add the following language before Paragraph 1.01.A:

The terms in these Supplementary Conditions that are defined in the Standard General Conditions of the Construction Contract (EJCDC C-700, 2018 edition) have the meanings assigned to them in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof. Substantial completion shall mean completion of all work except general clean-up. Any subsequent reference to Engineer shall mean owner’s representative. The terms “Owner” and “City” shall refer to the City of Iberia, Missouri.

SC 1.01.A. Add to the list of definitions in Paragraph 1.01.A. by inserting the following as a numbered item in its proper alphabetical position:

Punch List—Collectively, unfinished items of the construction of the Project, which unfinished items of construction are minor or insubstantial details of construction, mechanical adjustment or decoration remaining to be performed, the non-completion of which would not materially affect the use of the Project, and which are capable of being completed within thirty (30) days of Substantial Completion, subject to the availability of special order parts and materials.

ARTICLE 2 – PRELIMINARY MATTERS

SC 2.02.A. Amend the first sentence of Paragraph 2.02.A. to read as follows:

Owner shall furnish to Contractor <u>one copy</u> ~~four printed copies~~ of the Contract Documents (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). ~~Additional printed copies will be furnished upon request at the cost of reproduction.~~

SC 2.05 Delete Paragraph 2.05 in its entirety.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

SC 3.03 Delete Paragraph 3.03 in its entirety and insert the following in its place:

Review of Contract Documents and Field Conditions by Contractor

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A. By executing the Contract, the Contractor represents that the Contractor has reviewed and understands the Contract Documents, and is familiar with local conditions under which the Work is to be performed, has correlated personal observations with the requirements of the Contract Documents, and has notified the Engineer of and obtained clarification of any discrepancies which have become apparent during the bidding or proposal period.

B. The Contractor must carefully study and compare the Contract Documents among themselves and further compare the Contract Documents with any other information furnished by the Owner pursuant to this Section SC 3.03 before commencing Work at the Site and at frequent intervals during its progress.

C. The Contractor must take field measurements and verify Site conditions, and must carefully compare such field measurements and Site conditions and other information known to the Contractor with the Contract Documents, before ordering any material or doing any Work at the Site.

D. The Contractor must make frequent inspections during the progress of the Work to confirm that Work previously performed by the Contractor is in compliance with the Contract Documents and applicable Laws and Regulations bearing on the performance of the Work and Referenced Standards and that portion of Work previously performed by the Contractor or by others are in proper condition to receive subsequent Work.

E. If the Contractor believes that any portions of the Contract Documents do not comply with applicable Laws or Regulations, or any orders by code enforcement officials or the Owner or its designees acting in the capacity of building code inspectors or Referenced Standards, the Contractor must promptly notify the Owner and the Engineer of the non-compliance as provided in Subparagraph SC 3.03.F. and request direction before proceeding with the affected Work.

F. The Contractor must promptly notify the Owner and the Engineer in writing of any apparent errors, inconsistencies, omissions, ambiguities, construction impracticalities or code violations discovered as a result of the Contractor's review of the Contract Documents including any differences between actual and indicated dimensions, locations and descriptions, and must give the Owner and the Engineer timely notice in writing of same and of any corrections, clarifications, additional Drawings or Specifications, or other information required to define the Work in greater detail or to permit the proper progress of the Work. The Contractor must provide similar notice with respect to any variance between its review of the Site and physical data and Site conditions observed.

G. If the Contractor performs any Work involving an apparent error, inconsistency, ambiguity, construction impracticality, omission or code violation in the Contract Documents of which the Contractor is aware, without prompt written notice to the Owner and the Engineer and request for correction, clarification or additional information, as appropriate, the Contractor does so at its own risk and expense and all claims relating thereafter are specifically waived.

SC 3.06 Add the following new paragraph immediately after Paragraph 3.05:

Document Retention and Audit Provisions

A. Contractor shall account for all materials, equipment and labor entering into the Work and must keep such full and detailed records as may be necessary for proper financial management pursuant to the Contract Documents for a period of five (5) years after final payment.

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Furthermore, the Owner has the right to examine the Contractor's records directly or indirectly pertaining or relating to the Work or the Contract and the Contractor must grant the Owner access to and an opportunity to copy such records at all reasonable times during the Contract period and for five (5) years after final payment.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

SC 4.01 Delete Paragraph 4.01 in its entirety and insert the following in its place:

Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run immediately from the day indicated on the Notice to Proceed.

SC 4.04 Add the following new Paragraphs after Paragraph 4.04.B.:

C. Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Times are a reasonable period for performing the Work.

D. The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the Site or elsewhere prior to the effective date of insurance required by Article 6 to be furnished by the Contractor and Owner, or prior to approval of Certificates of Insurance, and Additional Insured Endorsement and Notice of Cancellation Endorsement required to be submitted to Owner under the Agreement. The date of commencement of the Work shall not be changed by the effective date of such insurance.

E. The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Times. If Contractor's Work shall fall behind schedule for reasons that are not excused under the terms of the Contract, Contractor shall add additional workers or shifts, and/or work overtime as necessary to maintain the Progress Schedule as a Cost of the Work.

F. The Contractor must conform to the most recently approved Progress Schedule. The Contractor must complete the indicated Work or achieve the required percentage of completion, as applicable, within any interim completion dates established in the most recently approved Progress Schedule.

G. The Contractor must maintain at the Site, available to the Owner and the Engineer for their reference during the progress of the Work, a copy of the approved Progress Schedule and any approved revisions thereto. The Contractor must keep current records of and mark on a copy of the approved Progress Schedule the actual commencement date, progress, and completion date of each scheduled activity indicated on the Progress Schedule.

H. The Contractor represents that its Bid includes all costs, overhead and profit which may be incurred throughout the Contract Times and the period between Substantial and final Completion. Accordingly, the Contractor may not make any Claim for delay damages based in whole or in part on the premise that the Contractor would have completed the Work prior to the expiration of the Contract Times but for any claimed delay.

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I. If the Contractor's progress is not maintained in accordance with the approved Progress Schedule, or the Owner determines that the Contractor is not diligently proceeding with the Work or has evidence reasonably indicating that the Contractor will not be able to conform to the most recently approved Progress Schedule, the Contractor must, promptly and at no additional cost to the Owner, take all measures necessary to accelerate its progress to overcome the delay and ensure that there will be no further delay in the progress of the Work and notify the Owner.

J. The Owner reserves the right to issue a Work Change Directive to accelerate the Work that may be subject to an appropriate adjustment, if any, in the Contract Price. If the Owner requires an acceleration of the Progress Schedule and no adjustment is made in the Contract Price, or if the Contractor disagrees with any adjustment made, the Contractor must file a Claim as provided in Article 12 or the same will be deemed to be conclusively waived.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC 5.02.C Add the following language at the end of the Paragraph:

If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Engineer will allocate the cost among those responsible.

SC 5.03 Delete Paragraphs 5.03.A and 5.03.B in their entirety and insert the following:

A. No reports of explorations or tests of subsurface conditions at or adjacent to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to Owner. Contractor shall have full responsibility with respect to subsurface conditions at the Site.

SC 5.04.A. & 5.04.B. Delete Paragraphs 5.04.A. and 5.04.B in their entirety and insert the following:

A. *Notice by Contractor*. If the Contractor encounters conditions at the Site that are (1) differing subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents (except in an emergency as required by Paragraph SC 7.15), the Contractor shall promptly provide written notice to the Owner and the Engineer before conditions are disturbed and in no event later than seven (7) days after first observance of the conditions.

B. *Engineer's Review.* The Engineer will promptly investigate such conditions and, if the Engineer determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Price or Contract Times, or both. If the Engineer determines that the conditions at the Site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Engineer shall promptly notify the Owner and Contractor in writing, stating the reasons. If

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either party disputes the Engineer's determination or recommendation, that party may proceed as provided in Article 12.

SC 5.06 Delete Paragraphs 5.06.A through 5.06.K. in their entirety and insert the following:

A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.

B. In the event the Contractor encounters on the Site material reasonably believed to be a Hazardous Environmental Condition (other than those for which the Contractor may have specific responsibility for remediation under the Contract), and the Contractor's reasonable precautions will be inadequate to prevent foreseeable damage or injury and the Contractor cannot proceed with the Work in the absence of the removal, containment or remediation of the Hazardous Environmental Condition, the Contractor must immediately stop Work in the area affected and report the condition to the Owner and the Engineer, in writing, within twenty-four (24) hours of discovery.

C. Upon receipt of notice of a suspected Hazardous Environmental Condition, Owner will cause an investigation to be made to verify the presence and extent of such materials, to determine whether such materials are in fact hazardous, and the steps necessary for their removal, containment or remediation.

D. If the Owner's investigation confirms the presence of a Hazardous Environmental Condition which present a risk of injury or damage which will not be adequately protected against by the Contractor's reasonable precautions, then the Work in the affected area must not thereafter be resumed except at the written direction of the Owner. The Work in the affected area will be resumed promptly (i) in the absence of a finding of a Hazardous Environmental Condition by Owner, (ii) upon the removal, containment or remediation of the Hazardous Environmental Condition, or (iii) upon the establishment of appropriate safety precautions.

E. The Contractor may request a change in the Contract Price or Contract Times if the Contractor incurs additional costs on account of or is delayed by the need to remove, contain or remediate the Hazardous Environmental Condition which has not been rendered harmless at the Site unless the Contractor is responsible for same under the Contract. Any such requested change in the Contract Price or Contract Times must be made in writing within ten (10) days of discovery of any Hazardous Environmental Condition, which has not been rendered harmless giving rise to the request for the change and must fully comply with Articles 4, 11, and 12 or any such requested change will be deemed conclusively waived by the Contractor.

F. The Owner shall not be responsible under this Section SC 5.06 for materials or substances the Contractor brings to the Site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

G. The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the Site and negligently handles, or (2) where the Contractor fails to perform its obligations under Paragraph SC 5.06.B., except to the extent that the cost and expense are due to the Owner's fault or negligence.

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H. If, without fault or negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.

I. Intentionally left blank.

ARTICLE 6 – BONDS AND INSURANCE

SC 6.01.A. At the end of Paragraph 6.01.A., add the following Subparagraphs:

1. The performance bond and payment bond, as identified in the General Conditions, Article 6.01, shall be identified herein as a Performance Bond. The Performance (Construction Completion) Bond shall be in the forms included in the Contract

3. As a provision of the Performance Bond or as a separate bond document, the Contractor will be required to furnish a two (2) year Maintenance Bond in an amount not less than 100% of the contract amount. In addition, a two (2) year Maintenance Bond clause in the amount of 100% of the cost to cover any settlement shall be provided.

4. Coincidental with the execution of the agreement, the Contractor shall furnish all required bonds in the forms included in the Agreement. The bonds shall be in the amount of not less than the contract such as indicated by the total base Bid guaranteeing the following:

   a. The faithful performance of all the covenants, guarantees and agreements of the contract and the payment of all bills and obligations arising from the execution of the contract, which bills or obligations might, or will, in any manner become a Claim against the Owner, and

   b. The work included in this contract against faulty materials (not including those furnished by the Owner) or poor workmanship for two (2) years after the time of its acceptance by the Owner. The bond shall be complete and in full accordance with statutory requirements.

   The bonds shall be executed through a company licensed and qualified to operate in the state of Missouri and is subject to approval by the Owner. The bonds shall be signed by an agent residing in the state of Missouri, and the date thereof shall be the date of the execution of the contract.

   If at any time during the term of the contract, the surety on the Contractor's bond become irresponsible, the Owner shall have the right to require additional and sufficient sureties which the Contractor shall furnish to the Owner's satisfaction within ten (10) days after the notice to do so. In default thereof, the contract may be suspended and all payments due the Contractor may be withheld.

SC 6.03 Add the following language at the end of Section 6.03:

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The limits of liability for the insurance required by paragraph 6.03 of the General Conditions do not infer or place a limit on Contractor's liability and shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

6.03.A. *Worker's Compensation*:

(a) Coverage as required by the statutes of the state of Missouri. The policy shall provide "other states" coverage.
(b) Applicable Federal (e.g., Longshoreman's)
(c) Employer's Liability:
By Accident - $500,000 each accident
By Disease - $500,000 each person
By Disease - $500,000 policy limit

6.03.B. *Commercial General Liability –Claims Covered*:

All insurance required of Contractor by this Agreement shall be first and primary until fully exhausted to the limits provided by this Agreement.

Self-insurance and/or self-insured retentions must be declared to and approved by the Owner. If any portion of any coverage is self-insured, Contractor must provide Owner with written claims handling procedures, to include the name, address, and telephone number of the claims handling office. This may be noted on the Certificate of Insurance or on a separate attached document. Any and all deductibles or self-insurance shall be assumed by and be for the account of, and at the sole risk of the contractor. The Owner may require written guarantees for payment procedures of self-insured losses including related investigations, claims administration and cost of defense.

6.03.C. *Commercial General Liability, Form and Content* (including completed operations and products liability) per site/project including Personal & Advertising Injury:

General	
$1,000,000	Per Occurrence
$2,000,000	Per Project Aggregate
Product - completed operations	
$1,000,000	Each Occurrence
$1,000,000	Per Project Aggregate

6.03.D. *Automobile liability:*

$1,000,000	Per Occurrence Bodily Injury and Property Damage, Combined Single Limit (or equivalent)

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6.03.E. *Umbrella or excess liability:*

This coverage obtained by Contractor shall be excess of the limits provided under the workers compensation and employer's liability, general liability and business automobile liability policies. The liability limits of the umbrella liability policy shall not be less than $1,000,000. Coverage limits contained in this Section SC 6.03 can be met by a combination of primary and umbrella policy limits.

6.03.F. *Contractor's pollution liability insurance:*

This coverage may be waived at the Owner's discretion.

SC 6.04 Delete Paragraph 6.04 and substitute the following:

The Owner and Engineer shall be included as additional insureds under policies required by paragraph 6.03 as commercially available. Upon request, Contractor shall provide copies of ISO form endorsements (CG 20 10) or equivalent indicating additional insured status of Owner and Engineer.

Any insurance or self-insurance maintained by the Owner and Engineer shall be separate and excess of the contractor's insurance and shall not contribute with it.

Contractor shall include all Subcontractors as additional insureds under its policies or shall submit to Owner for each Subcontractor separate certificates of insurance and endorsements which meet the requirements contained herein.

SC 6.05.A. *Property Insurance, Builder's Risk:* This insurance is not applicable to street, curb, and gutter projects, nor to the waterline or sewer line portion of water or sewer projects.

SC 6.06.B. and 6.06.C Delete Paragraphs 6.06.B. and 6.06.C. and substitute the following:

B. The Contractor and Owner waive claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

1. damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
2. damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

C. The mutual waiver provided in Paragraph 6.06.B. is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 16. Nothing contained in this Section 6.06 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

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ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

SC 7.01 Delete Paragraphs 7.01.A. and 7.01.B. in their entirety and insert the following:

A. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Engineer and shall not proceed with that portion of the Work without further written instructions from the Engineer. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

B. The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

C. The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

D. *Superintendent*

1. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The superintendent must provide his or her email address and cell phone number to Owner and Engineer and must be available to be contacted during all business hours, and outside of business hours in the event of an emergency.

2. The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Engineer the name and qualifications of a proposed superintendent. The Engineer may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Engineer has reasonable objection to the proposed superintendent or (2) that the Engineer requires additional time to review.

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Failure of the Engineer to reply within the 14 day period shall constitute notice of no reasonable objection.

3. The Contractor shall not employ a proposed superintendent to whom the Owner or Engineer has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

SC 7.02 Delete Paragraphs 7.02.A. and 7.02.B. in their entirety and insert the following:

A. The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them. Persons permitted to perform Work under Contractor or any Subcontractor or Sub-Subcontractor shall meet all employment eligibility, safety training, security or drug/alcohol testing requirements required by Laws or Regulations.

B. The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project. Work will be performed in accordance with the Contract Documents and the codes, ordinances, and other applicable Laws and Regulations governing the Contractor's performance of the Work. No delays resulting from compliance with applicable Laws or Regulations may form the basis for any claim by the Contractor for delay damages or additional compensation or for any extensions of the Contract Times.

C. If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and Owner shall be entitled to reimbursement from the Contractor. The Contractor must keep the Site and adjacent areas free from accumulation of waste materials or rubbish caused by operations under the Contract, and must keep tools, construction equipment, machinery and surplus materials suitably stored when not in use. If the Contractor fails to do so in a manner reasonably satisfactory to the Owner or the Engineer within forty-eight (48) hours after notice or as otherwise required by the Contract Documents, the Owner may clean the Site and back charge the Contractor for all costs associated with the cleaning. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

D. The Contractor must not permit work outside of hours established in the Contract Documents or on holiday observed by the Owner without the consent of the Owner. The Contractor must notify the Owner as soon as possible if Work must be performed outside such times established in the Contract Documents. In no event shall the Contractor permit Work to be performed at the Site without the presence of the Contractor's superintendent, other assigned project staff, or a designated representative of the Contractor, all whom must be knowledgeable of the Work required for the Project.

E. The Contractor must comply with all codes, ordinances, and other applicable Laws and Regulations covering the regulation of noise levels. It is the duty of the Contractor to

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familiarize itself with those provisions and perform the Work in compliance with those provisions.

SC 7.07.E. Amend Paragraph 7.07.E. to read as follows:

E. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor ~~shall~~ may be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; ~~and~~ Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement in order to prove Contractor's need for an adjustment in Contract Price or Contract Times, or both.

SC 7.07.N. Add the following language at the end of Section 7.06:

N. By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Engineer. Each subcontract agreement shall preserve and protect the rights of the Owner and Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

O. *Contingent Assignment of Subcontractors*

1. Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 16.02 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing, and assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

2. When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

3. Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

4. Upon such assignment to the Owner under this Paragraph 7.07.O, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner

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assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

SC 7.10 Delete Paragraph 7.10.A. in its entirety and insert the following:

A. The Owner enjoys tax exempt status. To enjoy the cost-savings benefits of its tax-exempt status, the Owner will provide a Tax Exemption Certificate to the Contractor for use on the Project. The Contractor shall use that certificate to exempt any purchases made for the Work from taxes. Contractor will pass on all savings for the tax-exempt status to the Owner. The Contractor agrees to bind all Subcontractors of any tier to the obligation to present and use the Tax Exemption Certificate and pass all savings to the Owner.

B. The Contractor will require all Subcontractors and bidders to provide cost information for materials separate from other costs for labor, profit, overhead, etc. to allow the Owner to verify that no taxes are to be paid on material procurement and that such savings shall be passed on to the Owner.

C. The Contractor will maintain all records, invoices, receipts, or other accounting data regarding material purchases and will allow, upon written request of the Owner and within a reasonable time frame after receipt of such request, the Owner to audit such records to verify tax savings. If an audit reveals taxes paid or savings not transferred to the Owner, the Contractor will be liable to the Owner for those amounts and the Owner may back-charge the Contractor for those amounts if a balance of funds due and payable remains at the time of such discovery.

1. The Contractor will require all Subcontractors of any tier maintain all records, invoices, receipts, or other accounting data regarding material purchases. The Contractor will collect such records with each Application for Payment it receives from its Subcontractors and shall maintain such records in the same manner and location as the Contractor's records.

2. The Contractor will ensure its Subcontractors and any lower-tier Subcontractors include these obligations in their contracts and bind themselves in the same manner as Contractor is bound to the Owner.

D. The Contractor shall pay sales, consumer, use and similar taxes, including unemployment compensation taxes, for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

SC 7.12.A. Amend Paragraph 7.12.A. to read as follows:

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

SC 7.13.B. Add the following language to the end of Paragraph 7.13.B.:

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1. The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.
2. The Contractor must not load nor permit any part of any structure at the Site to be loaded or subjected to stresses or pressures so as to endanger its safety or that of adjacent structures or property.
3. When explosives or other hazardous materials or equipment are stored or used or unusual methods are employed in the performance of the Work, the Contractor must exercise utmost care and conduct such activities under supervision of properly qualified personnel.
4. If the Contractor suffers injury or damage to person or property because of an act or omission of the Owner, or of any of the Owner's employees or agents, or of others for whose acts it is contended that the Owner is liable, written notice of such injury or damage, whether or not insured, must be given to the Owner within a reasonable time not exceeding ten (10) days after the onset or occurrence of such damage or injury or such shorter time as may be required by the Occupational Safety Hazards Administration (OSHA). The notice must provide sufficient detail to enable the Owner to investigate the matter. If notice is not received by the Owner within the time specified, any claims arising from the occurrence will be deemed to be conclusively waived, except to the extent of any applicable insurance (excluding self-insurance) coverage covering such occurrence. The provisions of this Section may not be used by the Contractor in lieu of the requirements of Article 11 when the Contractor is seeking an adjustment in the Contract Price and are in addition to the requirements of Article 4 when the Contractor is seeking an adjustment in the Contract Times.
5. The Contractor must promptly remedy, at its sole cost and expense, damage and loss to property referred to in Subparagraph SC 7.13.B.6 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable, unless otherwise instructed in writing by the Owner. This obligation is in addition to, and not in limitation of, the Contractor's obligations for indemnification under Paragraph SC 7.18.A. and the Contractor's responsibility to repair and or replace that portion of the Work and any materials and equipment to be incorporated therein which are damaged as a result of criminal mischief as specified in Subparagraph SC 7.13.B.6.
6. The Contractor is responsible for taking all reasonable and necessary precautions to secure and protect the Site, the Work, materials and equipment to be incorporated therein, and any tools or equipment of the Contractor necessary or beneficial to the performance of the Work from damage due to vandalism, theft, or other criminal mischief. The Contractor must repair and/or replace that portion of the work and any materials or equipment to be incorporated therein and any tools or equipment of the Contractor necessary or beneficial to performance of the Work which are damaged or stolen due to vandalism, theft or any other criminal mischief at its expense whether or not covered by insurance. No increase in the Contract Price will be granted to the

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Contractor as a consequence of any delay, impacts or inefficiencies resulting from any act of vandalism, theft or other criminal mischief whether or not caused or contributed to by the Contractor's negligence.

SC 7.15 Delete Paragraph 7.15.A. in its entirety and replace with the following:

In an emergency affecting safety of persons or property, the Contractor must take all necessary action, without the necessity for any special instruction or authorization from the Owner or Engineer, to prevent threatened damage, injury or loss. The Contractor must promptly, but in all events within twenty-four (24) hours of the emergency, report such action in writing to the Owner and Engineer. If the Contractor incurs additional costs on account of or is delayed by such emergency, the Contractor may request a change in the Contract Price or Contract Times to account for such additional costs or delay in accord with Articles 7, 8 and 15. The Contractor must file any such request within ten (10) days of the emergency or it is deemed waived. Any adjustment in the Contract Price or Contract Times shall be limited to the extent that the emergency work is not attributable to the fault or neglect of the Contractor or otherwise the responsibility of the Contractor under the Contract Documents.

SC 7.16.B. Add the following language to the end of Paragraph 7.16.B:

4. The Contractor must correct at its cost, and without any adjustment in Contract Times, any Work the correction of which is required due to the Contractor's failure to obtain approval of a submittal required to have been obtained prior to proceeding with the Work, including, but not limited to, correction of any conflicts in the Work resulting from such failure.

SC 7.17 Add the following language to the end of Section 7.17:

F. The Contractor's general warranty and any additional or special warranties are not limited by the Contractor's obligations to specifically correct defective or nonconforming Work as provided in Article 14, or are they limited by any other remedies provided in the Contract Documents. The Contractor shall also be liable for any damage to property or persons (including death) including direct damages relating to any breach of the Contractor's general warranty or any additional or special warranties required by the Contract Documents.

G. The Contractor must furnish all special warranties required by the Contract Documents to the Owner no later than Substantial Completion. The Owner may require additional special warranties in connection with the approval of "Or-Equals" or Substitutions, Allowance items, Work that is defective or nonconforming, or the acceptance of nonconforming Work pursuant to Article 14.

H. *After Substantial Completion*

1. In addition to the Contractor's obligations under Paragraph SC 7.17.F., if, within two years after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Subparagraph SC 15.01.B.3., or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner

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shall give such notice promptly after discovery of the condition. During the one-year period (or the period as agreed to by the Owner and Construction Manager and set forth in the Contract) for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Engineer, the Owner may correct it in accordance with Section 14.07.

2. The two-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

3. The two-year period (or the period as agreed to by the Owner and Construction Manager and set forth in the Contract) for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section SC 7.17.

4. The Contractor shall remove from the Site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

5. The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

6. Nothing contained in this Section SC 7.17 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the two-year period for correction of Work as described in Paragraph SC 7.17.G.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

SC 7.18.A. Revise Paragraph 7.18.A. to read as follows:

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify, defend, and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, attorneys, and other professionals, and all court, arbitration, mediation, or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than (1) the Work itself, or (2) the materials and equipment to be incorporated therein), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission

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of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Paragraph SC 7.18.A.

SC 7.18.B. Add the following Paragraph after Paragraph SC 7.18.A.:

B. In claims against any person or entity indemnified under Paragraph SC 7.18.A by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Paragraph SC 7.18.A. shall not be limited by the amount of insurance Contractor is required to carry under Article 6, nor by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 8 – OTHER WORK AT THE SITE

SC 8.01. Add the following language to the end of Section 8.01:

E. The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a separate contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a separate contractor's delays, improperly timed activities, damage to the Work or defective construction.

F. The Contractor shall promptly remedy damage the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or separate contractors as provided in Subparagraph SC 7.13.B.5.

SC-8.02 Delete Paragraphs 8.02.A. and B. in their entirety and replace with the following:

A. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the Site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 12.

B. When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

C. The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their current Progress Schedule. The Contractor shall make any revisions to the Progress

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Schedule deemed necessary after a joint review and mutual agreement. The Progress Schedule shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

D. Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights that apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Articles 6 and 7, this Article 8, and Article 14.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

SC 9.06.A. Delete Paragraph 9.06.A. in its entirety.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

SC-10.03 Add the following language after Paragraph 10.03.A:

B. The Resident Project Representative (RPR) will be Engineer's representative at the Site, will act as directed by and under the supervision of Owner, shall be the Owner's agent in all matters relating to on-site construction review of the Contractor's work, shall communicate only with the Owner and the Contractor (or Contractors), shall communicate with Subcontractors only through the Contractor or the Contractor's authorized superintendent, and will confer with Engineer regarding RPR's actions.

1. General: RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor.

2. Schedules: Review the Progress Schedule, schedule of Shop Drawing and Sample submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.

3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings, and prepare and circulate copies of minutes thereof.

4. Liaison:

   a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.

   b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.

   c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.

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5. Interpretation of Contract Documents: Report to Engineer and Owner when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer and Owner.

6. Shop Drawings and Samples:

    a. Record date of receipt of Samples and Contractor-approved Shop Drawings.

    b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.

    c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.

7. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, if any, to Owner and Engineer. Transmit to Contractor in writing decisions as issued by Owner and Engineer.

8. Review of Work and Rejection of Defective Work:

    a. Conduct on-Site observations of Contractor's work in progress (relating to portions of the project designed and specified by the Engineer under the Contract Documents) to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.

    b. Report to Owner and Engineer whenever RPR believes that any part of Contractor's work in progress is defective, will not produce a completed Project that conforms generally to the Contract Documents, or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

9. Inspections, Tests, and System Start-ups:

    a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.

    b. Observe, record, and report to Owner and Engineer appropriate details relative to the test procedures and systems start-ups.

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10. Records:

    a. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Owner and Engineer.

    b. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.

    c. Maintain records for use in preparing Project documentation.

11. Reports:

    a. Furnish to Owner and Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the Progress Schedule and schedule of Shop Drawing and Sample submittals.

    b. Draft and recommend to Owner and Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.

    c. Immediately notify Owner and Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, force majeure or delay events, damage to property by fire or other causes, or the discovery of any Constituent of Concern or Hazardous Environmental Condition.

12. Payment Requests: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Owner and Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

13. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. Completion:

    a. Participate in Owner's and Engineer's visits to the Site to determine Substantial Completion, assist in the determination of Substantial

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Completion and the preparation of a Punch List of items to be completed or corrected.

b. Participate in Engineer's final visit to the Site to determine completion of the Work, in the company of Owner and Contractor, and prepare a final Punch List of items to be completed and deficiencies to be remedied.

c. Observe whether all items on the final list have been completed or corrected and make recommendations to Owner and Engineer concerning acceptance and issuance of the notice of acceptability of the Work.

C. The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).

2. Exceed limitations of Owner's or Engineer's authority as set forth in the Contract Documents.

3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.

4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work.

5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.

6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Owner and Engineer.

7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.

8. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

SC 11.03.B.3. Add the following Subparagraph after Subparagraph 11.03.B.2.:

4. Where the work involved is not covered by unit prices contained in the Contract Documents, the unit prices will be determined by mutually agreed-upon prices.

ARTICLE 12 – CLAIMS

SC 12.01.B. Revise Paragraph 12.01.B to read as follows:

Submittal of Claim: The party submitting a Claim shall deliver it directly to the other party to the Contract in writing promptly (but in no event later than ~~30~~ 10 days) after the start of the event giving rise thereto or within 10 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later; in the case of appeals regarding Change Proposals within ~~30~~ 10 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that

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the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled. As a condition to making a Claim for an increase in the Contract Price, the Contractor shall maintain and produce accurate records to substantiate all additional costs actually incurred. If a Claim for a change in Contract Price is approved, the Owner shall pay the Contractor actual costs incurred, plus either (a) ten-percent (10%) for overhead and profit for work performed by the Contractor, or (b) five percent (5%) overhead and profit for work performed by a subcontractor, as applicable.

SC 12.01.C. Revise Paragraph 12.01.C. to read as follows:

Review and Resolution: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer. Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Paragraph SC 5.06.B. and Article 16, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Engineer will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Owner.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

SC 14.02.C. Add the following language to the end of Paragraph 14.02.C.:

If any test indicates non-compliance with applicable Specifications, Laws or Regulations, at least one additional test will be paid for by Contractor to determine actability of material or methods.

SC 14.02.G. Add the following Paragraph after Paragraph 14.02.F.:

In addition to the tests required by this Section 14.02, the Owner may at any time arrange for other tests, inspections and specific approvals to be performed by others selected by the Owner, at the Owner's expense. The Contractor must cooperate with the Owner and provide access to the Work for such tests, inspections and approvals.

SC 14.05.A. On the first line of Paragraph 14.05.A., after "Engineer", add ", upon written authorization from the Owner,".

SC 14.05.B. On the second line of Paragraph 14.05.B, after "Engineer", add ", upon written authorization from the Owner,".

SC 14.05.C. In the second line of Paragraph 14.05.B, after "Engineer's request", add ", upon written authorization from the Owner,".

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SC 14.07.A. On the first line of Paragraph 14.07.A., delete "reasonable time" and substitute "seven-day period (or such shorter time as may be reasonable to Owner under the circumstances)".

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC 15.01.B.3. At the end of Paragraph 15.01.B.3, add the following language:

Until the conditions set forth in this Section have been satisfied by Contractor, the amount of each monthly Application for Payment must include the value of each line item as indicated on the approved Schedule of Values, to the extent completed, less retainage as stated in the Agreement. The retainage will not be paid to the Contractor until thirty (30) days after all of the following conditions have been satisfied: (A) the Contractor has fully performed the Contract to the point of achieving final completion of the Work; (B) the Contractor has completed all Punch List items to the satisfaction of the Owner and the Engineer; (C) the Contractor has delivered to the Owner all Project close-out documents as required by the Agreement, including (1) all maintenance and operating manuals; (2) marked sets of as-built drawings and/or other electronic media documenting as-built conditions; (3) all guarantees and warranties required under the Contract Documents; (4) a list of names, addresses, and telephone numbers for all subcontractors and others providing guarantees and warranties; and (D) the applicable governmental authorities have issued to the Owner the final use and occupancy permit for the Project.

SC 15.01.C.1. On the first line of Paragraph 15.01.C.1, delete "10" and substitute "7".

SC 15.03.B. Add the following new subparagraphs to Paragraph 15.03.B:

1. The Contractor shall promptly correct Work rejected by the Engineer or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Engineer's services and expenses made necessary thereby, shall be at the Contractor's expense.
2. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, shall be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC 15.06.A. Delete Section 15.06.A. in its entirety and replace with the following:

A. *Completion of Punch List and Application for Payment*

1. When the Contractor has completed or corrected all items on the final Punch List and considers that the Work is complete and ready for final acceptance, the Contractor must give written notice to the Owner and the Engineer and request a final inspection of the Work as provided in Paragraph SC 15.06.A.2. The Contractor's notice and request for a final inspection must be

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accompanied by a final Application for Payment and the submittals required by Paragraph SC 15.06.A.3.

2. Upon receipt of the Contractor's notice and request for final inspection, the Owner and the Engineer will promptly make such inspection and, when the Owner and the Engineer concur that the Work has been fully completed and is acceptable under the Contract Documents, the Engineer will issue a Certificate of Final Completion to the Owner. The Contractor's notice and request for final inspection constitutes a representation by the Contractor to the Owner that the Work has been completed in full and strict accordance with terms and conditions of the Contract Documents. The Engineer will promptly notify the Contractor if the Owner or the Engineer do not concur that the Work is finally complete. In such case, the Contractor must bear the cost of any additional services of the Owner or the Engineer until the Work is determined to be finally complete.

3. Neither final payment nor any remaining retained percentage will become due until the Contractor submits the following documents to the Engineer:

    a. an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner), have been paid or otherwise satisfied, submitted on a form as may be prescribed by or agreed to by the Owner;

    b. a release or waiver of Liens on behalf of the Contractor and a similar release or waiver on behalf of each Subcontractor and Supplier, accompanied by an affidavit of release of Liens on a form as may be prescribed by or agreed to by the Owner;

    c. a certificate evidencing that the Contractor's liability insurance and Performance Bond remain in effect during the correction period (as stated in the Agreement) following Substantial Completion as set forth in Section SC 7.17;

    d. a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents;

    e. consent of surety to final payment, submitted on a form prescribed by or agreed-upon by the Owner;

    f. other data required by the Owner establishing payment or satisfaction of obligations, such as receipts, releases and waivers of Liens, Claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be prescribed by the Owner;

    g. an as-built Site plan in the form and number required by the Contract Documents;

    h. all warranties and bonds required by the Contract Documents;

    i. Record Documents as provided in Paragraph SC 7.12.A. and return of Contract Documents as provided therein; and

    j. Attic stock items as required by the Contract Documents; and

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k. As applicable, documentation of approval by the agency having jurisdiction for all Storm Water Management (SWM) work as to allow closeout of the SWM Permit. Approval by the appropriate agency will be based on satisfying all Permit requirements including the submission of all required SWM documentation.

4. If the Contractor is unable to secure from any Subcontractor or Supplier a release or waiver required under the Contract, the Contractor must furnish a bond satisfactory to the Owner to indemnify the Owner and any co-obliges under the bond against any lien or claim from such Subcontractor or Supplier. The Contractor must also indemnify the Owner for all costs incurred by the Owner in removing, discharging or otherwise settling all Subcontractor or Supplier Liens or Claims, including all personnel and consultant costs and reasonable attorneys' fees.

SC 15.06.B. In the first sentence of Paragraph 15.06.B., fifth line, delete "ten" and substitute "seven".

SC 15,08.A. In the first sentence of Paragraph 15.08.A., first line, delete "one year" and substitute "two years".

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

SC 16.01.A. Delete Paragraph 16.01.A. and replace with the following:

A. The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine by written notice to Contractor and Engineer.

B. The Contract Price and Contract Times shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Paragraph SC 16.01.A. Adjustment of the Contract Price shall not include profit. No adjustment shall be made to the extent

1. that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
2. that an equitable adjustment is made or denied under another provision of the Contract; or
3. if a Change Proposal seeking such adjustments is submitted more than thirty (30) days after the date fixed by Owner for resumption of the Work.

SC 16.02.A.3. Delete "or" at the end of Subparagraph 16.02.A.3.

SC 16.02.A.4. Delete "." at the end of Subparagraph 4 and substitute "; or"; add the following Subparagraphs after Subparagraph 4.:

5. Contractor's failure to make payment to Subcontractors or Suppliers for materials or labor in accordance with the respective agreements between the Contractor and such Subcontractors or Suppliers;
6. Contractor anticipatorily breaches or repudiates the Contract;
7. Contractor fails to make satisfactory progress in the prosecution of the Work required by the Contract; or

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8. Contractor endangers the performance of the Contract.

SC 16.02.B.-G. Delete Paragraphs 16.02.B. through 16.02.G. and substitute the following:

B. The Owner may terminate the Contract, in whole or in part, whenever the Owner determines that sufficient grounds for termination exist as provided in Subsection SC 16.02.A. The Owner will provide the Contractor (and any surety) with a written notice to cure the default. If the default is not cured, the termination for default is effective on the date specified in the Owner's written notice. However, if the Owner determines that default contributes to the curtailment of an essential service or poses an immediate threat to life, health, or property, the Owner may terminate the Contract immediately upon issuing oral or written notice to the Contractor without any prior notice or opportunity to cure. In addition to any other remedies provided by Laws or Regulations or the Contract, the Contractor must compensate the Owner for additional costs that foreseeably would be incurred by the Owner, whether the costs are actually incurred or not, to obtain substitute performance. A termination for default is a termination for convenience if the termination for default is later found to be without justification.

C. Upon receipt of written notice from the Owner of termination, the Contractor must:

1. cease operations as directed by the Owner in the notice and, if required by the Owner and County, participate in an inspection of the Work with the Owner, County and the Engineer to record the extent of completion thereof, to identify the Work remaining to be completed or corrected, and to determine what temporary facilities, tools, equipment and construction machinery are to remain at the Site pending completion of the Work;

2. complete or correct the items directed by the Owner, and take actions necessary, or that the Owner may direct, for the protection and preservation of any stored materials and equipment and completed Work;

3. unless otherwise directed by the Owner, remove its tools, equipment and construction machinery from the Site, and

4. except as directed by the Owner, terminate all existing subcontracts and purchase orders and enter into no further subcontracts or purchase orders.

D. Following written notice from the Owner of termination, the Owner may:

1. declare Contractor to be in default and give Contractor (and any surety) notice that the contract is terminated;

2. enforce the rights available to Owner under any applicable performance bond;

3. take possession of the Site and of all materials and equipment thereon, and at the Owner's option, such temporary facilities, tools, construction equipment and machinery thereon owned or rented by the Contractor that the Owner elects to utilize in completing the Work;

4. accept assignment of subcontracts and purchase orders; and

5. complete the Work by whatever reasonable method the Owner may deem expedient.

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E. Upon termination for cause,

1. the Contractor must take those actions described in Section SC 16.02.C, and the Owner may take those actions described in Section SC 16.02.D, subject to the prior rights of the Contractor's Surety.

2. If the Contractor files for Bankruptcy protection, or a petition is filed against it, under applicable Bankruptcy laws, and Contractor wishes to affirm the Contract, Contractor shall immediately file with the Bankruptcy Court a motion to affirm the Contract and shall provide satisfactory evidence to Owner and to the Court of its ability to cure all present defaults and its ability to timely and successfully complete the Work. If Contractor does not make such an immediate filing, Contractor accepts that Owner may petition the Bankruptcy Court to lift the Automatic Stay and permit Owner to terminate the Contract.

F. When the Owner terminates the Contract for cause, the Contractor is not entitled to receive further payment until the Work is completed and the costs of completion have been established.

G. If the unpaid balance of the Contract Price less amounts which the Owner is entitled to offset from the unpaid Contract balance including actual or Liquidated Damages, exceeds the costs of completing the Work, including compensation for the Owner's and the Engineer's services made necessary thereby, such excess will be paid to the Contractor or Surety, as directed by the Surety. If such costs exceed the unpaid Contract balance, the Contractor must pay the difference to the Owner upon written demand. This obligation for payment survives termination of the Contract.

H. In completing the Work following termination for cause, the Owner is not required to solicit competitive Bids or to award completion work to the lowest Bidder, but may obtain such completion work and related services on the basis of sole source procurement and negotiated compensation.

I. Where Contractor's services have been terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any performance, maintenance, and/or statutory bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

J. If and to the extent that Contractor has provided a performance and maintenance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Section 16.02.

SC 16.03 Delete Section 16.03 in its entirety and substitute the following:

A. The Owner may, at any time, terminate the Contract or any portion thereof or of the Work for the Owner's convenience and without cause.

B. Upon receipt of written notice from the Owner of termination, the Contractor must:

1. Cease operations as directed by the Owner in the notice and, if required by the Owner, participate in an inspection of the Work with the Owner and the Engineer to record the extent of completion thereof, to identify the Work remaining to be

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completed or corrected, and to determine what temporary facilities, tools, equipment and construction machinery are to remain at the Site pending completion of the Work;

2. Complete or correct the items directed by the Owner, and take actions necessary, or that the Owner may direct, for the protection and preservation of any stored materials and equipment and completed Work;

3. Unless otherwise directed by the Owner, remove its tools, equipment and construction machinery from the Site, and

4. Except as directed by the Owner, terminate all existing subcontracts and purchase orders related to the Work and enter into no further subcontracts or purchase orders therefor.

C. Following written notice from the Owner of termination, the Owner may:

1. Take possession of the Site and of all materials and equipment thereon, and at the Owner's option, such temporary facilities, tools, construction equipment and machinery thereon owned or rented by the Contractor that the Owner elects to utilize in completing the Work;

2. Accept assignment of subcontracts and purchase orders; and

3. Complete the Work by whatever reasonable method the Owner may deem expedient.

D. In case of termination for the Owner's convenience, the Contractor will be entitled to compensation only for the following items:

1. Payment for acceptable Work performed up to the date of termination;

2. The costs of preservation and protection of the Work if requested to do so by the Owner;

3. The cost of terminating the following contracts including:

a. Purchased materials but only if not returnable and provided to the Owner, or the restocking or return charge, if any, if returnable at the Owner's written election;

b. Equipment rental contracts if not terminable at no cost but not to exceed an amount equal to thirty (30) days rental;

4. Documented transportation costs associated with removing Contractor-owned equipment;

5. Documented demobilization and close-out costs; and

6. Overhead and profit on the foregoing not to exceed ten (10%) percent.

The Contractor is not entitled to any other costs or compensation (including lost or expected profits or revenues, uncompensated overhead or related expenses, or other economic loss arising out of or resulting from such termination, including, but not limited to, the cost of preparing and documenting its compensable expenses under this Subparagraph SC 16.03.D.

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as a consequence of the Owner's termination of the Contract for convenience. The Contractor conclusively and irrevocably waives its right to any other compensation or damages (compensatory or punitive) arising from termination of the Contract. If the Owner and the Contractor are unable to agree upon the amounts specified in this subsection, the Contractor may submit a Claim as provided in Article 12. The Claim must be limited to resolution of the amounts specified in Subparagraphs SC 16.03.D.1, SC 16.03.D.2., SC 16.03.D.3., and SC 16.03.D.4. No other cost, damages or expenses may be claimed or paid to the Contractor or considered as part of the Claim, the same being hereby conclusively and irrevocably waived by the Contractor. Any such Claim must be delivered to the Owner within thirty (30) days of the termination of the Contract and must contain a written statement setting forth the specific reasons and supporting calculations and documentation as to the amounts the Contractor claims to be entitled to under this Subsection as a result of the termination of the Contract.

E. The Contractor's obligations surviving final payment under the Contract, including without limitation those with respect to insurance, indemnification, and correction of Work that has been completed at the time of termination, remains effective notwithstanding termination for convenience of the Owner.

SC 16.04 Delete Section 16.04 in its entirety.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

SC 17.02 Add the following new paragraph immediately after Paragraph 17.01:

Mediation

A. Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Paragraph SC 6.06.B shall be subject to mediation as a condition precedent to binding dispute resolution the institution of legal or equitable proceedings by either party.

B. The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution. Mediation shall proceed in advance of legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Paragraph SC 17.02.B., the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

C. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof. Any dispute under the Agreement not resolved by

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mediation shall be litigated in the closest Court of competent jurisdiction thereto as a bench trial, provided however, that a bench trial does not violate any provisions of the Fairness in Public Construction Contracting Act.

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DIVISION OF LABOR STANDARDS

MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

MISSOURI PUBLIC WORKS PROJECTS
PUBLIC BODY CHECK-OFF LIST

The Division of Labor Standards (DLS) is providing this check-off list to assist public entities in being compliant with Missouri's labor laws applicable to public construction projects. The Prevailing Wage Law requires that not less than the prevailing hourly rate of wages be paid to workers on all construction projects over $75,000 total that are for the public use or benefit or that use public funds. Failure to comply with the Prevailing Wage Law may constitute a misdemeanor for the employer and for the public official that does not fulfill the responsibilities it imposes. The Construction Safety Training Act mandates that all employees working on the site of public works construction projects must have received safety training.

I
Before Contract Is Let

- ☐ Before the contract is let, you must submit a Request for Wage Determination form (PW-3) to the DLS to obtain the annual wage order from their website www.labor.mo.gov/DLS/PrevailingWage (Sections 290.250 and 290.325, RSMo).
- ☐ Attach the wage order obtained from DLS, and make it a part of, the specifications for the work to be performed under the contract (Section 290.250 and 290.325, RSMo).
- ☐ Create a contract which incorporates the following:
  - ☐ Insert a statement such as: "**Not less** than the prevailing hourly rate of wages, as set out in the wage order attached to and made part of the specification for work under the contract, **shall** be paid to all workers performing work under the contract." (Section 290.250, RSMo).
  - ☐ Insert a statement such as: "The contractor will forfeit a penalty to the contracting public body of $100 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under the contract by the contractor or by any subcontractor." (Section 290.250, RSMo). For detailed information on rules and occupational titles, see 8 CSR 30-3.010 through 3.060.
  - ☐ Insert a statement such as: "The contractor and all subcontractors to the contract must require all on-site employees to complete the ten-hour construction safety training program required under Section 292.675, RSMo, unless they have previously completed the program and have documentation of having done so."
  - ☐ Insert a statement such as: "The contractor will forfeit a penalty to the contracting public body of $2500 plus an additional $100 for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training." (Section 292.675, RSMo).
- ☐ Before any work begins, you must send a **Prevailing Wage Project Notification – Contractor Information Notification** form (PW-2) to the DLS. Send it when the contract is awarded to ensure the DLS receives it timely (Section 290.262.9, RSMo, and 8 CSR 30-3.010[3]).
- ☐ Verify if a wage subsidy, bid supplement, or rebate was provided, and if so, if it was provided lawfully. The amount and date of such subsidy, supplement or rebate must be reported to the public body within 30 days of receipt of payment (Section 290.095, RSMo).

II
While Contract Is Being Performed

☐ Review records of wages paid to all workers employed on the contract to assure workers are paid properly (Section 290.290, RSMo). Records must be kept within the state by the contractor and each subcontractor for a period of one year following completion of the public works project. DLS provides a Contractor Payroll Records form (LS-57) for contractors and subcontractors to use to assure provision of the payroll information required (8 CSR 30-3.010[7]).

☐ If you are aware of any possible prevailing wage violation, you must report it to the DLS using the **Prevailing Wage Complaint** form (PW-6). A public body cannot make final payment until full compliance with the law has been achieved.

☐ A legible list of all prevailing wage rates **must remain** posted in a prominent and easily accessible place at the worksite by each contractor and subcontractor on the project. **Require** the notice to be posted during the entire time that any worker is employed on the job (Section 290.265, RSMo).

III
Before Contract Is Fully Paid

☐ Before final payment can be made, the general contractor and all subcontractors **must** file an **Affidavit of Compliance** form (PW-4) with the contracting public body. The affidavit must state the party has fully complied with the Missouri Prevailing Wage Law, and the public body must verify that the correct wages were paid. No payment can be legally made by the public body to the contractor(s) until the affidavit is filed in proper form and order with the public body (Section 290.290 and 290.325, RSMo).

☐ It shall be the duty of such public body awarding the contract, and its agents and officers, to take cognizance of all complaints of all violations of the provisions of section 290.210 to 290.340 committed in the course of the execution of the contract, and, when making payments to the contractor becoming due under the contract, to withhold and retain therefrom all sums and amounts due and owing as a result of any violation of section 290.210 to 290.340 (Section 290.250.1, RSMo).

Failure to comply with the requirements of the Prevailing Wage Law can result in civil action, including an injunction stopping work on a project, and in criminal fines of up to $500 and up to six months imprisonment for **each day** there is a violation.

Missouri Department of Labor and Industrial Relations
Division of Labor Standards
Prevailing Wage Section
P.O. Box 449
Jefferson City, MO 65102-0449
Phone: 573-751-3403
Fax: 573-751-3721

Email: prevailingwage@labor.mo.gov

Website: www.labor.mo.gov/DLS/prevailingwage/

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TDD/TTY: 800-735-2966 Relay Missouri: 711

DIVISION OF LABOR STANDARDS

MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

MISSOURI PUBLIC WORKS PROJECTS CONTRACTOR CHECK-OFF LIST

The Division of Labor Standards (DLS) is providing this check-off list to assist contractors in being compliant with Missouri's labor laws applicable to public construction projects. The Prevailing Wage Law requires that not less than the locally prevailing wages be paid to workers on every construction project in the state that is for the public use or benefit or that uses public funds. Failure to comply with the Prevailing Wage Law may constitute a misdemeanor for the employer and for the public official that does not fulfill the responsibilities it imposes. The Construction Safety Training Act mandates that all employees working on the site of public works construction projects must have received safety training.

I
Before Contract Is Let

☐ The annual wage order obtained from the DLS website (www.labor.mo.gov/DLS/PrevailingWage) must be made a part of the specifications for the work to be performed under the contract (Section 290.250 and 290.325, RSMo).

II
While Contract Is Being Performed

☐ All workers performing work under a public construction contract must be paid not less than the prevailing hourly rate of wages (as set out in the annual wage order attached to and made part of the specification for work under the contract). (Section 290.250, RSMo).

The contractor will forfeit a penalty to the contracting public body of $100 per day (or portion of a day) for each worker that is paid less than the prevailing rate for any work done under the contract by the contractor or by any subcontractor (Section 290.250, RSMo). For detailed information on rules and occupational titles, see 8 CSR 30-3.010 through 3.060.

☐ The contractor and all subcontractors to the contract must require all on-site employees to complete the ten-hour construction safety training program required under Section 292.675, RSMo, if they have not previously completed the program and have documentation of having done so.

The contractor will forfeit a penalty to the contracting public body of $2500 plus an additional $100 for each employee employed by the contractor or subcontractor, for each calendar day, or portion thereof, such employee is employed without the required training. (Section 292.675, RSMo).

☐ A legible list of all prevailing wage rates **must remain posted** in a prominent and easily accessible place at the worksite by each contractor and subcontractor on the project. The notice must be posted during the full time that any worker is employed on the job (Section 290.265, RSMo).

☐ The payroll records required to be so kept shall be open to inspection by any authorized representative of the contracting public body or of DLS at any reasonable time and as often as may be necessary and such records shall not be destroyed or removed from the state for the period of one year following the completion of the public work in connection with which the records are made (Section 290.290, RSMo). DLS provides a Contractor Payroll Records form (LS-57) for contractors and subcontractors to use to assure provision of the payroll information required (8 CSR 30-3.010[7]).

III
Before Contract Is Fully Paid

☐ Before final payment can be made, the general contractor and all subcontractors **must** file an **Affidavit of Compliance** (PW-4) with the contracting public body. The affidavit must affirm under oath that the party has fully complied with Missouri Prevailing Wage Law, and the public body must verify that the correct wages were paid. No payment can be legally made by the public body to the contractor(s) until the affidavit is filed in proper form and order with the public body (Section 290.290 and 290.325, RSMo).

☐ It shall be lawful for any contractor to withhold from any subcontractor under him sufficient sums to cover any penalties withheld from him by the awarding body on account of any such subcontractor's failure to comply with the terms of sections 290.210 to 290.340, and if payment has already been made to him, the contractor may recover from the subcontractor the amount of the penalty in a suit at law (Section 290.250.1, RSMo).

Failure to comply with the requirements of the Prevailing Wage Law can result in civil action, including an injunction stopping work on a project, and in criminal fines of up to $500 and up to six months imprisonment for **each day** there is a violation.

Missouri Department of Labor and Industrial Relations
Division of Labor Standards
Prevailing Wage Section
P.O. Box 449
Jefferson City, MO 65102-0449
Phone: 573-751-3403
Fax: 573-751-3721

Email: prevailingwage@labor.mo.gov

Website: www.labor.mo.gov/DLS/prevailingwage/

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DIVISION OF LABOR STANDARDS

MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

PREVAILING WAGE PROJECT NOTIFICATION – CONTRACTOR INFORMATION

☐ New ☐ Update

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

1. Date of Notification	2. Annual Wage Order Number Included in Bid Specifications
3. Popular or Descriptive Name of Project	
4. Estimated Project Cost of Completion *(total construction contracts to be awarded)* $	
5. Exact Location of Project County City	
6. Official Name of Public Body or Agency	
7. Name of Contact Person	8. Phone Number *(include area code)*
9. Address	
10. Email Address Website	

11. Contract Award Date	12. Estimated Date of Project Completion	13. Will There Be Any Federal Funds Used in this Contract? ☐ Yes ☐ No

14. Contractor Information Notification

General Contractor:

Name _____

Address _____

City _____ State _____ ZIP _____

Phone Number _____ Email Address _____

Type of Craftsmen Needed by Project _____

Scope of Work _____

List all Subcontractors:

1. Name _____

Address _____

City _____ State _____ ZIP _____

Phone Number _____ Email Address _____

Type of Craftsmen Needed by Project _____

Scope of Work _____

2. Name _____

Address _____

City _____ State _____ ZIP _____

Phone Number _____ Email Address _____

Type of Craftsmen Needed by Project _____

Scope of Work _____

3. Name _____

Address _____

City _____ State _____ ZIP _____

Phone Number _____ Email Address _____

Type of Craftsmen Needed by Project _____

Scope of Work _____

(Subcontractors continued)

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

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

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

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

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

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

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

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

SUBMIT

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DIVISION OF LABOR STANDARDS

MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

AFFIDAVIT
COMPLIANCE WITH THE PREVAILING WAGE LAW

I, _____, upon being duly sworn upon my oath state that: (1) I am the
(Name)

_____ of _____; (2) all requirements of
(Title) *(Name of Company)*

§§ 290.210 to 290.340, RSMo, pertaining to the payment of wages to workers employed on public works projects have been fully satisfied with regard to this company's work on _____;
(Name of Project)

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

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

_____
Signature

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

My commission expires _____, _____.

_____
Notary Public

_____
Receipt by Authorized Public Representative

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

DIVISION OF LABOR STANDARDS

MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

CONTRACTOR'S WAGE SURVEY

PROJECT INFORMATION

Contractor's Name, Address, and Phone Number

Please Select One:

☐ Collective Bargaining Agreement Rate

☐ Non-Collective Bargaining Agreement Rate

County _____

Project Description _____

Dates of Work Reported Below

Beginning ____/____/____ Ending ____/____/____

Type of Construction: ☐ Building ☐ Heavy and Highway

Email _____ Website _____

Occupational Title(s)	Total Hours	Basic Hourly Rate	Hourly Fringe Benefits Payments			
			H&W	Retirement	Paid Time Off	Training

The Contractor's Wage Survey must be submitted to the Division of Labor Standards by January 31. Surveys can be submitted monthly, however, it is strongly recommended they are submitted at least quarterly, within 31-days after the end of each quarter.

Certification

I am the Contractor for the above-named project. To the best of my knowledge, information and belief, I hereby certify that the number of hours, basic hourly rate, and fringe benefit payments listed above are true and correct and that the type of work performed by the number of employees identified above, relative to the Occupational Title(s) reported, is consistent with8 CSR 30-3.060. I further recognize that any false statement or declaration made herein is punishable under Sections 290.340, 570.090, 575.050, and 575.060, RSMo.

Email completed form to: prevailingwage@labor.mo.gov
Or
Mail completed form to:
Missouri Department of Labor and Industrial Relations
DIVISION OF LABOR STANDARDS
Attn: Prevailing Wage Section
P.O. Box 449
Jefferson City, MO 65102-0449

Date _____

Signature /S/ _____

Printed Name _____

Title _____

Contact Information:
Phone: 573-751-3403
Email: prevailingwage@labor.mo.gov
Website: labor.mo.gov/DLS

LS-04 (11-23) AI

The Division of Labor Standards requests your participation in our Prevailing Wage Survey. Surveys are conducted throughout the year to determine the prevailing wages paid to construction workers in all Missouri counties and the city of St. Louis. Your responses to this survey are your opportunity to participate in establishing the state's prevailing wages.

Please complete the survey form on the other side according to the instructions given below. Complete all spaces on the form or indicate "Not Applicable" or "Not Available" where appropriate. You must complete the Project Information entirely for your survey to be accepted.

1) Indicate the dates when the work was performed.

2) Indicate whether the work performed was paid at a Collective Bargaining Agreement Rate or a Non-Collective Bargaining Agreement Rate.

3) Indicate the type of construction (See 8 CSR 30-3.040)

   - BUILDING – sheltered enclosure with walk-in access for the purpose of housing persons, machinery, equipment or supplies.
   - HEAVY AND HIGHWAY – antenna towers, channels, levees, pipe lines, sewers, etc.

   Hours worked on residential construction (single family homes or apartment buildings of less than four stories) and general maintenance should not be reported on this survey. Accordingly, wage data for ALL commercial construction SHOULD be reported.

4) Provide the project information for each project you are reporting. If you require additional forms, visit labor.mo.gov/media/pdf/ls-04-ai.

5) Please report only wages and fringe benefits paid for actual hours worked. We cannot accept wage information that is estimated or averaged.

6) Report hours worked in each occupational title. This must be consistent with the occupational titles identified in 8 CSR 30-3.060 (i.e., carpenter, plumber, electrician (inside wireman), operating engineer Group I, etc.). Multiple hourly rates paid to workers require a separate line for each occupational title and rate.

   Wage rates should be reported only for journeyman workers. Do not include wages paid to apprentice and entry-level workers during on-the-job training periods. Supervisors that are working foremen (those that work with tools) may be reported at the journeyman rate for the hours that they are actually working with the tools, but only if they are receiving wages higher than the journeyman rate.

   Only straight time hourly rates of pay should be reported. Do not include overtime rates of pay. All hours of work, including all overtime hours of work, must be reported at the straight time rate of pay.

7) Combine fringe benefits in the appropriate columns. H&W includes dental, health, vision, and life insurance. Retirement includes annuities, pension supplements, and 401K contributions. Paid time off includes holiday and vacation. Training includes apprenticeship and safety training. Percentages must be converted into hourly rates. Additional information can be found at dls-awo-form.labor.mo.gov.

8) In the space provided, include the printed name, title, and signature of the person preparing this report. By typing your name in the signature block you are certifying that the information you have provided is true and correct to the best of your knowledge.

Thank you for participating in this wage survey. We encourage you to continue to participate by periodically submitting additional reports. If you have any questions or suggestions, please contact us at 573-751-3403 or prevailingwage@labor.mo.gov.

DIVISION OF LABOR STANDARDS

MISSOURI DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

CONTRACTOR PAYROLL RECORDS

(See Sections 290.210 to 290.340, RSMo and 8 CSR 30-3.010 to 8 CSR 30-3.060)

Name of ☐ Contractor ☐ Subcontractor	Address of Contractor or Subcontractor: City: State: ZIP: Phone Number: ( ) -
Name of Public Body	Address of Public Body: City: State: ZIP: Phone Number: ( ) -

Payroll No.	For Week Ending	AWO	Project and Location	Project or Contract No.
	/ /			

1. Name and Address of Employee	2. Occupational Title ***	3. Day and Date								4. Total Hours	5. Hourly Rate	6. Gross Amt	7. Deductions					8. Net Wages Paid for Week
		Day										Project / Week	FICA and Medicare	Federal and State Withholding Tax	Other A	Other B	Total Deductions	
		Date																
		Hours Worked Each Day																
		DT																
		OT																
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****** If a worker performs work in more than one occupational title, you must separately list the hours worked per occupational title and wage rates. ******

FRINGE BENEFITS

In addition to the basic rates paid to each laborer or mechanic on the payroll, payments have been or will be made to appropriate programs for the benefit of these employees as shown in the following chart below. If fringe benefit amounts paid are the same for all employees, you may list the amount of each such identical fringe payment only once in the appropriate column; if the fringe benefit amounts vary by employee, list each employee's name and set out the amounts paid on behalf of each employee for each fringe benefit.

Employee Name	Health and Welfare ($/hr)	Pension ($/hr)	Vacation ($/hr)	Holiday ($/hr)	Appren-tice Training ($/hr)	Other C ($/hr)	Other D ($/hr)	Total ($/hr)	If "Other/Deduction" or Fringes, please explain. (Indicate Other A, B, C or D)	Identify by name, the plan, fund, or programs to which fringe benefits are paid. (Indicate H&W, Pension, etc.)

Date: _____

I, _____ *(Name of Signatory Party)*, _____ *(Title)* do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ *(Contractor or Subcontractor)* on the _____ *(Building or Work)*; that during the payroll period commencing seven (7) days prior to the week ending date of _____ all persons employed on said project have been paid the full weekly wages stated above, that no rebates have been or will be made either directly or indirectly to or on behalf of _____ *(Contractor or Subcontractor)*, from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than legally permissible deductions, that full and accurate records clearly indicating the names, occupations, and crafts of every worker employed by them in connection with the public work together with an accurate record of the number of hours worked by each worker and the actual wages paid for each class or type of work performed and deduction made for each worker have been prepared, that these payroll records are kept and have been provided for inspection to the authorized representative of the contracting public body and will be available as often as may be necessary and such records shall not be destroyed or removed from the state for the period of one year following the completion of the public work in connection with which the records are made.

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage order incorporated into the contract; that the occupational title set forth herein for each laborer or mechanic conform with the work performed.

Name and Title	Signature
The falsification of any of the above statements may subject the contractor or subcontractor to criminal prosecution. See Sections 290.340, 570.090, 575.050, and 575.060, RSMo.	

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

Rules of
Department of Labor and Industrial Relations
Division 30—Division of Labor Standards
Chapter 3—Prevailing Wage Law Rules

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Title 8—DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
Division 30—Division of Labor Standards
Chapter 3—Prevailing Wage Law Rules

8 CSR 30-3.010 Applicable Wage Rates for Public Works Projects

PURPOSE: This rule sets forth applicable wage requirements relative to work performed by workers on public funded projects.

(1) All public bodies of Missouri, before advertising for bids or undertaking construction work, must obtain from the department an annual wage order which sets forth the applicable hourly rate of wages (the prevailing wage or the public works contracting minimum wage as provided in section 290.257) in the locality. The rates so determined shall be incorporated in the contract specifications and made a part of those specifications, except that construction contracts of the State Highway and Transportation Commission need not list specific wage rates to apply, but may refer to the wage rates contained in the appropriate General Wage Orders issued by the department, as applicable.

(2) Request for annual wage orders shall be initiated at least ten (10) calendar days before advertisement of the specifications for the contract for which the determination is sought. An exception from this provision will be made by the department only upon a proper showing of extenuating circumstances. The department has prepared and printed Form No. PW-3 for use in making a request. The form may be secured by writing Division of Labor Standards, PO Box 449, Jefferson City, MO 65102 or by visiting the following website: https://labor.mo.gov/sites/labor/files/pubs_forms/PW-3-AI.pdf.

(3) A project notification form PW-2 must be filed for each separate project by the public body, except the State Highways and Transportation Commission, which will be furnished prevailing wage determinations under General Wage Orders.

(4) The annual wage order issued by the department contains the current applicable wage rates in the locality at the time the annual wage order is issued. Hours worked during the calendar year are used to set the prevailing wage rates in the annual wage order issued in March of the following year. The department will consider hours submitted for use in its initial determination of the prevailing wage rates to be included in a particular year's wage order only if those hours are received from a contractor, by either paper submission on a form provided by the department or in electronic format, no later than January 31 of that year. Handwritten submissions will not be accepted. For purposes of submitting reportable hours, the term "contractor" shall include a "subcontractor." The department will not include the following hours in the calculation of the annual wage order:

(A) Hours not readily identifiable as being submitted by a contractor;

(B) Hours worked by federally-registered apprentices or entry-level workers;

(C) Hours worked on residential construction projects.

(5) Section 290.262.8, RSMo, provides that the annual wage order for a particular occupational title may be altered once each year with an incremental increase. A public body shall specify in the call for bids for each contract the applicable hourly rate of wages in the locality for each type of worker as set forth in the annual wage order or any replacement page(s) identifying the annual incremental increase issued by the department for the prevailing hourly rate of wages. The wage rates attached to, and made a part of, the call for bids for a contract shall remain in effect for the duration of that particular contract.

(6) It should be understood by all interested parties that the certified applicable wage rates determined by the department are minimum wage rates. The contractor may not pay less than the applicable wage rates determined by the department for the project or contract awarded to him/her as set forth in the proposal on which s/he submitted his/her bid. Employees are free to bargain for a higher rate of pay and employers are free to pay a higher rate of pay.

(7) Each month the successful bid contractors shall submit certified copies of their current payrolls to the contracting public body. The public body, upon receipt of the payrolls on a project, shall keep the payrolls on file for a period of one (1) year from the date of submission of the final payrolls by the contractor. Payroll records shall set out accurately and completely, for each individual, the following information which shall be specifically recorded by occupational title classification and type of worker (journeyman, entry-level worker, or federally-registered apprentice): name and address of each worker, rate of pay, daily and weekly number of hours worked, deduction made, and actual wages paid. The payroll records shall be available at all times for inspection by authorized representatives of the Department of Labor and Industrial Relations.

(8) The public body shall make examinations of the payrolls and other records of each contractor or subcontractor as may be necessary to assure compliance with the provisions of the law. In connection with those examinations, particular attention should be given to the correctness of classifications and any disproportionate employment of any workers. The examinations shall be of a frequency that may be necessary to assure conformity with the provisions of the law. An examination shall be made after the project has been substantially completed but prior to the acceptance of the affidavit as required by section 290.290, RSMo. If any violation of sections 290.210–290.580, RSMo, is discovered by the inspecting public body, it is their duty under section 290.250, RSMo, to withhold and retain from payments to the contractor all sums and amounts due and owing as a result of any violation. Any violation shall be immediately reported to the Division of Labor Standards at PO Box 449, Jefferson City, MO 65102 or by telephone or electronically.

AUTHORITY: section 290.240.2, RSMo Supp. 2018. Original rule filed Dec. 18, 1975, effective Dec. 28, 1975. Amended: Filed July 24, 1984, effective Nov. 11, 1984. Amended: Filed Aug. 24, 1990, effective April 29, 1991. Emergency amendment filed Sept. 15, 1994, effective Sept. 25, 1994, expired Jan. 13, 1995. Emergency amendment filed Dec. 9, 1994, effective Jan. 14, 1995, expired May 13, 1995. Emergency amendment filed May 1, 1995, effective May 14, 1995, expired Sept. 10, 1995. Amended: Filed May 1, 1995, effective Aug. 30, 1995. Amended: Filed July 17, 1995, effective Jan. 30, 1996. Amended: Filed March 27, 2000, effective Oct. 30, 2000. Amended: Filed Nov. 9, 2000, effective May 30, 2001. Emergency amendment filed Nov. 10, 2015, effective Nov. 20, 2015, expired May 17, 2016. Amended: Filed Nov. 10, 2015, effective April 30, 2016. Emergency amendment filed Nov. 21, 2018, effective Dec. 1, 2018, expired May 29, 2019. Amended: Filed Nov. 21, 2018, effective July 30, 2019.*

**Original authority: 290.240, RSMo 1957, amended 1969, 2018.*

***Woodman Engineering Company v. Butler**, 442 SW2d 83 (Mo. App. 1969). The function of reviewing court in prevailing wage cases is to decide if the determination of the commission was authorized by law and was supported by competent and substantial evidence upon the whole record. A decision clearly contrary to the evidence should be set aside. However, all pertinent evidence and factors must be considered in determining the applicable prevailing wage.*

***City of Joplin v. Industrial Commission of Missouri**, 329 SW2d 687 (Mo. En Banc 1959). Administrative agencies do not have authority to determine constitutionality of legislation. Determination of prevailing wage earnings by commission must be based upon all current relevant factors.*

8 CSR 30-3.020 Definitions

PURPOSE: This rule sets forth the definition of certain terms for purposes of issuance and use of annual and general wage orders under the Prevailing Wage Law, sections 290.210–290.580, RSMo and the rules in this chapter.

(1) The term construction of public works generally includes construction activity as distinguished from manufacturing, furnishing of materials or servicing and maintenance work. The term includes, without limitation, the construction of buildings, structures and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing and landscaping. The manufacture or furnishing of materials, articles, supplies or equipment is not construction of public works within the meaning of the Prevailing Wage Law unless conducted in connection with and at the site of construction. The term construction of public works also means all work done in the construction or development of a public works project, including without limitation, altering, remodeling, demolishing existing structures, installation on the site of the construction of items fabricated off-site, painting and decorating, the transporting of materials and supplies to or from the site of the construction by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies or equipment on the site of the construction by persons employed by the contractor or subcontractor.

(2) The term site of the building or construction job means the physical place(s) where the public works are to be constructed, and also means other adjacent or nearby property used by the contractor or subcontractor in that construction which can reasonably be said to be included in the site. Except as otherwise provided in this section, fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards and the like, are part of the site of the building or construction job provided they are dedicated in a substantial degree to the performance of the public works project, and are so located in proximity to the actual construction location that it would be reasonable to include them. The dedication of seventy-five percent (75%) or more of the output of a fabrication plant, batch plant and the like, to the public works project raises a rebuttable presumption that the facility is part of the site of the building or construction job. The presumption may be rebutted by evidence showing that the facility was established for other legitimate commercial purposes that make the facility useful well after the public works project has been completed. Not included in the site of the building or construction job are permanent home offices, branch plant establishments, fabrication plants and tool yards of a contractor or subcontractor whose location and continuance in operation are determined wholly without regard to a particular public works project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, tool yards and the like, of a commercial supplier or materialman which are established by a supplier of materials for the project before opening of bids and not on the project site are not included in the site of the building or construction job. The permanent, previously established facilities are not a part of the site of the building or construction job, even where the operations for a period of time may be dedicated exclusively, or nearly so, to the performance of a public works project.

AUTHORITY: section 290.240, RSMo 1994. Original rule filed Aug. 24, 1990, effective April 29, 1991. Amended: Filed July 17, 1995, effective Jan. 30, 1996.*

**Original authority: 290.240, RSMo 1957, amended 1959.*

8 CSR 30-3.030 Apprentices and Entry-Level Workers

PURPOSE: This rule sets forth the requirements for the payment of wages to apprentices and entry-level workers employed on public works subject to the Prevailing Wage Law.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Journeymen's rate of pay shall be paid to all workers employed on public works construction except entry-level workers or apprentices registered and participating in apprentice programs registered with the United States Department of Labor, Employment and Training Administration; and apprentices registered and participating in programs certified by the Secretary of the United States Department of Transportation as promoting equal opportunity in connection with federal-aid highway construction programs. Such workers shall be paid not less than fifty percent (50%) of the applicable wage rate for a journeyman worker under the appropriate occupational title for a specific locality. In calculating the applicable wage rate for a journeyman worker, fringe benefits shall be included.

(2) As set forth in section 290.235, "on-the-job training workers" are defined as follows:

(A) "Federally-registered apprentices" – Workers participating in programs administered by the United States Department of Labor and subject to their specific requirements (*See 29 U.S.C. section 50 and 29 C.F.R. 29)* and workers participating in programs administered by the United States Department of Transportation and subject to their specific requirements. (*See 23 U.S.C. section 113 and 23 C.F.R. 230);* and

(B) "Entry-level workers"—Any worker who is not a journeyman and who is not otherwise enrolled in a federally-registered apprenticeship program but is participating in an on-the-job training program provided by the contractor for whom they perform work on a public construction project.

(3) Workers employed on federal-aid highway construction projects may be paid at an apprentice rate of pay if enrolled in an apprenticeship or skill training program which has been certified by the Secretary of the United States Department of Transportation pursuant to 23 U.S.C. 113. In the event the Secretary of Transportation withdraws approval of a program, the contractor will no longer be permitted to pay workers less than the applicable predetermined rate for the work performed until an acceptable program is approved.

AUTHORITY: section 290.240, RSMo Supp. 2018. Original rule filed Aug. 24, 1990, effective April 29, 1991. Amended: Filed July 17, 1995, effective Jan. 30, 1996. Emergency amendment filed Nov. 21, 2018, effective Dec. 1, 2018, expired May 29, 2019. Amended:*

Filed Nov. 21, 2018, effective July 30, 2019.

**Original authority: 290.240, RSMo 1957, amended 1969, 2018.*

8 CSR 30-3.040 Classifications of Construction Work

PURPOSE: The Department of Labor and Industrial Relations has the responsibility under section 290.260, RSMo to determine the prevailing hourly rate of wages to be paid to workers engaged in work of a similar character. This rule establishes classifications of construction work for the department to use in determining the prevailing hourly rate of wages for work of a similar character.

(1) All public works construction, for which the prevailing hourly rate of wages or the public works contracting minimum wage of workers are to be determined, shall be classified as either—

(A) Building construction; or

(B) Highway and heavy construction.

(2) Building construction shall mean the following:

(A) Building structures, including modification, additions or repairs, or both, to be used for shelter, protection, comfort, convenience, entertainment or recreation, or for protection of people or equipment;

(B) Buildings at an airport project, such as terminal buildings, freight buildings, and any other construction necessary for the operation of the airport facilities;

(C) Stadiums, athletic fields, dressing rooms, bleachers, and all other buildings needed in connection with an athletic or entertainment facility;

(D) Entire buildings that are built aboveground in connection with highway, subway, or tunnel projects, such as tool stations or housing for mechanical equipment;

(E) Excavation for the building itself, including backfilling inside and outside the building;

(F) Storm and sanitary sewers inside the building and to the curb line;

(G) Work in connection with telephone, electrical, water, oil, gas, or fuel lines, or other utility or communication lines inside a building and to the curb line;

(H) Sidewalks other than those that are poured in connection with a street or road project;

(I) Driveways that are built to serve a building;

(J) Parking lots connected to a building and all structures built as parking facilities;

(K) Retaining walls built in conjunction with a building project;

(L) Demolition of a building(s) as part of the site preparation for new building construction;

(M) Landscaping of building sites or the planting of all shrubbery that is incidental to building construction as defined in section (2); and

(N) Work on water and wastewater treatment plants within the fence line.

(3) Highway and heavy construction shall mean the following:

(A) Work in connection with roads, streets, parkways, alleys and highways including, but not limited to, grading, paving, curbing, signs, fences, guard rails, bridges, lighting, retaining walls, and landscaping;

(B) Work on viaducts, overpasses, underpasses, drainage projects, aqueducts, irrigation projects, flood control projects, reclamation projects, reservoir filtration and supply projects, water power, duct lines, distribution lines, pipe lines, locks, dikes, levees, revetments projects, excluding work specifically defined as building construction;

(C) Work in connection with underground construction on tunnels and shafts;

(D) Railroad work in its entirety, including elevated railroads;

(E) Main and side sewers;

(F) Work in connection with airports, such as runways, roads, and streets, but excluding that which is listed as building construction;

(G) Work in connection with telephone, electrical, water, oil, gas, or fuel lines, or any other utility or communication lines from the curb line;

(H) Sidewalks when poured incidental to a street or road project;

(I) Parking lots not incidental to a building construction project; and

(J) Demolition of all buildings as part of site preparation for any highway and heavy construction as is otherwise defined in section (3).

AUTHORITY: section 290.240, RSMo Supp. 2018. Original rule filed Aug. 24, 1990, effective April 29, 1991. Amended: Filed July 17, 1995, effective Jan. 30, 1996. Emergency amendment filed Nov. 21, 2018, effective Dec. 1, 2018, expired May 29, 2019. Amended: Filed Nov. 21, 2018, effective July 30, 2019.*

**Original authority: 290.240, RSMo 1957, amended 1969, 2018.*

8 CSR 30-3.050 Posting of Prevailing Wage Rates

PURPOSE: This rule sets forth the requirements for the posting of prevailing wage rates on public works projects subject to the Prevailing Wage Law.

(1) Contractors and subcontractors engaged in public works projects shall post the applicable hourly rate of wages (the prevailing wage or the public works contracting minimum wage as provided in section 290.257, excluding rates on projects for which the engineer's estimate or the bid accepted by the public body for the total project cost is less than seventy-five thousand dollars ($75,000)) in a dry, accessible place within the field office at the site of the building or construction job. On public works projects for which no field office is needed or established, such as road construction, sewer lines, pipelines, and the like, a contractor/subcontractor may post the applicable hourly rates of wages at the contractor/subcontractor's local office or batch plant, so long as the contractor/subcontractor provides a copy of the prevailing hourly wage rates to any worker upon request. Applicable hourly wage rates must be posted and maintained in a clearly legible condition for the duration of the public works project as provided by law.

AUTHORITY: section 290.240, RSMo Supp. 2018. Original rule filed Aug. 24, 1990, effective April 29, 1991. Emergency amendment filed Nov. 21, 2018, effective Dec. 1, 2018, expired May 29, 2019. Amended: Filed Nov. 21, 2018, effective July 30, 2019.*

**Original authority: 290.240, RSMo 1957, amended 1969, 2018.*

8 CSR 30-3.060 Occupational Titles of Work Descriptions

PURPOSE: The Department of Labor and Industrial Relations is required to determine the prevailing hourly rate of wages to be paid to each worker engaged in construction on a public works project, relative to the type of work performed by each worker. This rule describes by occupational title the type of work performed in the construction of a public works project in Missouri and sets forth the procedures to be followed in identifying each occupational title utilized on a public works project.

(1) Each occupational title defines by name the type of work performed in the construction of a public works project. The description of work designated for a particular occupational title is not intended to be jurisdictional in scope or nature, and is not to be construed as limiting or prohibiting workers from engaging in construction work falling within

several occupational titles.

(2) Each occupational title of work description shall be based upon the particular nature of the work performed, with consideration given to those trades, occupations or work generally considered within the construction industry as constituting a distinct classification of work. In determining occupational titles and scope of work definitions, the department shall consider the following:

(A) Collective bargaining agreements;

(B) *Dictionary of Occupational Titles*, as published by the United States Department of Labor; and

(C) Opinions of experts from organized labor and the opinions of contractors and contractor associations as they relate to the custom and usage applicable to the construction industry in Missouri.

(3) Interested parties who wish to submit wage information to be used in establishing the prevailing hourly rate of wages for a particular class or type of work are required to identify the work according to the applicable occupational title of work description set forth in this rule. Hours of work reported by a contractor or subcontractor to the department shall not be used to establish the prevailing hourly rate of wages if the party submitting the hours of work fails to identify the work under one of the occupational titles included in section 290.257.

(4) Any question as to the proper classification of work should be resolved before the work in question is commenced. Interested parties are encouraged to contact the Prevailing Wage Section of the Division of Labor Standards for an interpretation of these rules and for a determination of the appropriate occupational title of work description, relative to the class or type of work to be performed.

(5) The occupational titles and work descriptions for each type or class of work contained herein are valid throughout the entire state of Missouri. Through an objection to a wage order, an interested party may assert that any given description of work, as stated within this rule, does not apply to a specific occupational title(s) and that a different work description should apply to that occupational title(s). The interested party shall have the burden of proving by a preponderance of the evidence the inapplicability of the description of work within that particular occupational title, but shall be afforded the opportunity to do so in a hearing on an objection to the wage order before the Labor and Industrial Relations Commission.

(6) Occupational titles of work descriptions may be obtained from the department by written request to the director of the Division of Labor Standards, PO Box 449, Jefferson City, MO 65102 or by visiting the following website: https://labor.mo.gov/DLS/PrevailingWage/pwContractors.

(7) The occupational titles of work descriptions set forth here are as follows:

(A) Asbestos Worker—Applies to workers who apply insulation materials to mechanical systems to reduce loss or absorption of heat, prevent moisture condensation, and to deaden sound and prevent vibration. The workers remove all insulation materials from mechanical systems unless the mechanical system is being scrapped. The work falling within this occupational title of work description includes:

1. The preparation, including the building of enclosures and hanging polyurethane, and physical distribution on the job site of asbestos, cork, plastic, magnesia or similar materials, or other materials used as a substitute, and used as thermal insulation. The manufacture, fabrication, assembling, molding, handling, erection, spraying, pouring, making, hanging, application, adjusting, alteration, repairing, dismantling, reconditioning, corrosion control, and testing of heat or frost insulation, such as asbestos, cork, mineral wall, infusorial earth, mercerized silk, flax, fiber, fire felt, asbestos paper, asbestos curtain, asbestos millboard, fibrous glass, foam glass, styrofoam, polyurethane, polystyrene, metals, plastics, fibrous matter, roving, and resins, and the erection of scaffolding up to fourteen feet (14'), working platform;

2. The covering, including encapsulation, of boilers, tanks, refrigeration units, evaporators, turbines, fittings, valves, ducts, flues, vats, equipment, hot and cold pipes, or any other hot or cold surfaces with the insulation materials listed in this rule, used for the purpose of thermal insulation, fire stoppage, fireproofing, radiator protection, sound deadeners, and the lagging (covering) on piping; and

3. The removal of all insulation materials from mechanical systems, unless the mechanical system is being scrapped, whether they contain asbestos or not (pipes, boilers, ducts, flues, breechings). All cleanup required in connection with this work, shall include the sealing, labeling, and dropping of scrap material into the appropriate containers. (After drop, final disposal is considered to be the class or type of work falling within the occupational title of work description for second semiskilled laborer.);

(B) Boilermaker—Applies to workers who assemble, erect, and repair boilers, tanks, vats, and pressure vessels according to blueprint specifications, using handtools, portable power tools, and equipment. The work falling within this occupational title of work description includes:

1. Locating and marking of reference points for columns on plates or foundations, using master straightedge, squares, transit, and measuring tape;

2. Using rigging or cranes to lift parts to specified positions;

3. Aligning structures or plate sections, using plumb bobs, levels, wedges, dogs, or turnbuckles;

4. Drilling, reaming, chipping, caulking, and grinding of structures and sections and bolting or welding them together;

5. Setting of drums and headers and installation of tubes;

6. Cleaning up as necessary in connection with this work; and

7. Riveting, acetylene burning, rigging, fitting-up, impact machine operating, unloading and handling of material and equipment where power equipment and rigging are required;

(C) Bricklayers—Applies to workers who prepare, lay, set, bed, point, patch, grout, caulk, cut, fit, plumb, align, level, anchor, bolt, or weld brick, stone masonry, precast aggregate panels, and all types of artificial or imitation masonry. Also, the workers install expansion joint materials in brick, stone masonry, precast aggregate panels, and all types of artificial or imitation masonry. The work falling within this occupational title of work description includes:

1. The unloading of brick, stone masonry, precast aggregate panels, and all types of artificial or imitation masonry where power equipment and rigging are required;

2. The masonry paving and rip-rapping of all types, with or without mortar;

3. The reinforcing of masonry, including placing, tying, and setting of rods;

4. The application of insulation systems and materials, and air and/or vapor barrier systems and materials, by spray, trowel, roller, adhesive, or mechanically fastened in or to all masonry walls;

5. The caulking of abutting masonry openings in masonry walls, expansion joints, and false joints in all types of masonry;

6. The waterproofing of all types of masonry, which shall include installation and application of air and/or vapor barrier systems and materials by spray, trowel, roller, adhesive, or mechanically fastened; and

7. The cleaning, tuckpointing, sandblasting, steam cleaning, and Gunite work on all types of masonry;

(D) Carpenter (which shall include pile driver, millwright, lather, and linoleum layer)—Applies to workers who construct,

erect, install, and repair structures, structural members and fixtures made of wood, plywood, wallboard, and materials that take the place of wood, such as plastic, metals, composites, fiberglass, and Transit sheeting and Cemesto Board, using carpenter hand tools and power tools. The work falling within this occupational title of work description includes:

1. General Carpenter.

A. The layout of buildings or structures on the site or plot. The installation of aluminum expansion joints for buildings and bridge structure as well as concrete strike-off machines.

B. The making and setting of all concrete forms (except curb forms on heavy construction), including establishment of building lines or flow lines (box culverts, bridges) including footing forms. The making of all forms used in tilt-up construction. The layout, installation, and construction for wall forms and footing forms, all block-outs, wood or steel, layout, and installation of all embedded items.

C. The building and handling of scaffolds used by carpenters to work from. All scaffolding, constructed or assembled, fourteen feet six inches (14'6") and higher for normal or specialty use—regardless of purpose.

D. The building of rough wooden structures, such as concrete forms, scaffolds, wooden bridges, trestles, coffer dams, tunnel and sewer support, welding and burning.

E. The selection of specified type of lumber or other materials. Prepare layout, using rule, framing square, and calipers. Mark cutting and assembling lines on materials, using pencil, chalk, and marking gauge. Shape materials to prescribed measurements, using saws, chisels, and planes. Assemble, cut, and shape materials and fasten them together with nails, dowel pins, or glue. Erect framework for structures. Verify trueness of structure with plumb bob and carpenter's level. Apply decorative paneling to walls.

F. The installation of ladders, handrails, walkways, platforms, and gangways made of wood as well as shoring and lagging. Install doors and wood and metal windows and bucks, including hardware (bucks are rough frames in which finished frames are inserted) in building framework and brace them with boards nailed to framework. Install pallet racks and metal shelving. Install subflooring in buildings. Install insulation such as batt, board, safing, thermal, styrofoam, sound attenuation, fiberglass when the installation of the insulation material is not being applied as an integral part of the roofing system. Nail plaster grounds (wood or metal strips) to studding. Fit and nail sheathing on outer walls and roofs on buildings. Install beams and trusses of wood laminate.

G. The making, handling, and setting of all frames, sash, blinds, trim, and other fixtures (for example, cabinets, bookcases, and benches), when made of wood or any wood substitute. The handling and assembly of chairs, seats, bleachers, and benches and other furniture in theaters, halls, schools, and other places of assemblage on floors of any kind. Install protection screens, chalk boards, toilet partitions (plastic laminate, solid plastic). Caulking of fixtures and countertops including Corian tub and shower enclosures.

H. The installation of wood and metal studs and exterior panels.

I. The handling, cutting, sawing, fitting of drywall (sheetrock), and lead-lined drywall whether for walls, ceilings, floors, soffits, or any use, no matter how installed—nailed, screwed, glued, or otherwise (interior, exterior). Lead-lined drywall is used in X rays to avoid radiation exposure. Install corner guards and wooden and plastic column covers.

J. The handling and installation of acoustical and egg crate ceiling systems in its entirety (hanger wire, grid, molding, tile) whether vertically or horizontally installed.

K. The installation of all builders hardware, including door tracks of every description. The installation of all weather strips. The making, fitting, and hanging of fly screens for doors, windows, and other openings.

L. Installation of wood and hollow metal doors, rollup garage doors, overhead doors or rolling fire doors, automatic doors, channel iron door bucks, glass sliding, and bi-fold doors.

M. The installation of access flooring, computer floors, and raised or elevated floors. Install modular headwall units and laboratory casework and fume hoods;

2. Pile Driver—The work falling within the occupational title of work description for pile driver includes:

A. The handling, layout, driving, cutting, and splicing of wood, metal, or concrete piling regardless of purpose (for example, sheets, I-beams, pile caps, and welding to piling);

B. The assembly, disassembly, and rigging of the pile driving equipment; and

C. The conduct of underwater diving that is incidental to pile driving work;

3. Millwright—Applies to workers who design, build, or repair mills or mill machinery; hoist, dismantle, erect, assemble, line, and adjust all machines used in the transmission of power in buildings, factories or elsewhere; unload machines used in the transmission of power in buildings, factories, or elsewhere, where power equipment and rigging are required. The work falling within this occupational title of work description includes: the setting of all classes of engines, direct drive motors, dynamos, turbines, generators, and air compressors and pumps. The assembling, setting, and packing of all compressors and pumps. The placing of all pulleys, sheaves, and fly wheels on the listed equipment. The making and setting of all templates and bolts for all machinery requiring same. Drypacking for sole plates. Installation of truck and railroad scales. Installation of trash compactors. Installation of all types of conveyors. The cutting and threading of all bolts. The handling and operating of all acetylene and devices for heating, welding, and cutting when used in connection with millwright work;

4. Lather—Applies to workers who erect horizontal metal framework to which laths are fastened, using nails, bolts, studgun, or a combination of these, drills holes in floor and ceiling, and drives ends of wooden or metal studs into holes to provide anchor for furring or rockboard laths. The occupational title of lather applies to workers who nail, clip, or fasten, all types of wood, wire, and metal laths, plasterboard, wallboard, rockboard, gypsum, sheetrock, and acoustical materials which take the place of same to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fireproofing, or acoustical material. The occupational title of work description for lather applies to workers who erect all metal plastering accessories which are covered or serve as ground, or both, guard, stock, or screed for plaster materials, including wire mesh. The work falling within the occupational title of work description includes:

A. The installing of carrying bars and purlins (pieces of horizontal timber), light iron, and metal furring (thin strips of wood or metal to create air space) of all descriptions, such as rods, channels, flat iron, T-bar, H-bar, and other ceiling bars or systems for the receipt of lath and board;

B. The wiring of plasterer channels to overhead structural framework to provide support for plaster or acoustical ceiling tile; and

C. The nailing of plaster grounds (wood or metal strips) to studding to provide a guide for those workers performing work falling within the occupational title of work description for plasterer;

5. Linoleum Layer—Applies to workers who measure, cut, sew, make-up and seam, tape, fit, lay, and install and seal and wax materials to be cemented, tacked, or otherwise applied to its base, wherever it may be. These materials may be used as shock-absorbing, sound-absorbing, or decorative coverings. With the exception of terrazzo,

magnesite, and latex built-up floors, the materials include oil cloth, matting, linen, carpet, synthetic turf, linoleum, vinyl, plastic, rubber, cork, mastic, asphalt, mastipave, tile, wood tile, interlocking and magnetic tile, chalk and bulletin board, nonslip or abrasive materials, resilient, decorative seamless surface coatings, monolithic coverings (monolithic shall mean all resilient seamless material such as epoxy, polyethylene, plastics and their derivatives, components and systems), and all other resilient coverings on floors, walls, counters, table tops, and ceilings. The work falling within the occupational title of work description includes:

A. The handling of materials at the point of installation;

B. The performing of all necessary preparation and finish work, such as sweeping, scraping, sanding, or chipping dirt and irregularities from base surfaces and filling cracks with putty, plaster, or cement grout to form smooth, clean foundations, drilling holes for sockets and pins;

C. The installing of underlayment, sanding and filling, fitting of metal edgings, metal corners, and caps and fitting devices for attachment of these materials;

D. The spreading of adhesive cement over floor to cement foundation material to the floor;

E. The laying of covering on cement; and

F. The rolling of finished floor to smooth it out and press cement into base and covering;

(E) Cement Mason (which shall include plasterer)—The work falling within this occupational title of work description includes:

1. Cement Mason - Applies to workers who perform work on concrete where finishing tools are used.

A. The setting of screeds, the rodding (buildings), shaping, smoothing, and finishing of the surfaces of freshly poured concrete floors, walls, sidewalks, curbs, steps, and stairways, the finishing of extruded barrier rails or any other concrete surface requiring finishing, using hand tools or power tools, including floats, trowels, screeds, and straightedge.

B. The removing of rough or defective spots from concrete surfaces, using grinder or chisel and hammer and patching holes with fresh concrete or epoxy compound preparatory to sacking.

C. The molding of expansion joints and edges, using edging tools, jointers, and straightedge.

D. The application of penetrating sealer and primer protective coatings to concrete floors and steps when part of the finishing process.

E. The installation of seamless composition floors and the installation and finishing of epoxy-based coatings or polyester-based linings to all surfaces, when the coatings or linings are applied by spraying or troweling.

F. The sandblasting or water blasting for architectural finish or preparatory to patching.

G. The cutting of joints with concrete saw for the control of cracks in buildings and sidewalks, driveways, and curbs and gutters contiguous to buildings.

H. The setting of concrete curb, gutter, and sidewalk forms one (1) board high up to twelve inches (12");

2. Plasterer – Applies to workers who apply gypsum, Portland cement, stucco, imitation stone, and kindred materials and products to interior walls, ceilings, and partitions and to exterior walls of buildings, and finish those materials and products.

A. The spreading of plaster over laths, masonry, or any other base, using trowel, and smoothing the plaster with darby and float for uniform thickness;

B. The application of the various manufacturers' brand names of thin coat or plaster veneer;

C. The application of all bonding agents and mastical;

D. The roughing of undercoat with wire or metal scraper to provide bond for succeeding coat of plaster;

E. The application of all malleable plastic materials and epoxy materials;

F. The setting in place of plasterboard, insulation board, styrofoam and beadboard, ground, locks, patent dots, cork plates, brownstone and acoustical tile, fiberglass reinforcement and finished products;

G. The plastering of joints, nail holes, and bruises on wallboard;

H. The grouting and filling of door bucks, runners, and similar installations, in conjunction with plastering operations;

I. The application of scratchcoat, browncoat, and finish coat of plaster to wood, metal or board laths successively to all ceilings and walls when finished with terrazzo or tile, and the application of any plastic material to same;

J. The fireproofing of all building assemblies with plaster materials, sprayed fiberglass or similar materials, whether applied to gypsum, metal lath, or directly;

K. The application of crushed stone, marble, or ceramic chips and broken glass where embedded in plaster, or similar materials;

L. The placing of acoustic blocks with any plastic material, regardless of thickness;

M. The placing, by any method, of plaster or composition caps and ornaments;

N. The creating of decorative textures in finish coat by marking surface of coat with brush and trowel or by spattering it with small stones (stucco) where plastering equipment or materials, or both, are used; and

O. The operation and control of all types of plastering machines, including power trowels and floats;

(F) Communications Technician—Applies to workers who install, inspect, repair, and service electronic and telecommunication systems. The work falling within the occupational title of Communication (Electronic/Telecommunication) Technician includes:

1. Installing, repairing, and servicing of radio, television, and recording systems and devices; systems for paging, intercommunication, public address, wired music, clocks, security and surveillance systems, and mobile radio systems; fire alarm and burglar alarm systems;

2. Wiring of low-voltage surface wiring and wiring in nonmetallic conduits and incidental shielded metallic conduit runs of no longer than ten feet (10') nor larger than one inch (1") when required in conjunction with the work listed in this rule;

3. Installing, repairing, servicing, or a combination of these, of the Main Distribution Frame (MDF) where the permanent outside lines entering a building terminate and where the subscriber's line multiple cabling and trunk multiple cabling originate. It is usually located on the ground floor of a building;

4. Installing, repairing, servicing, or a combination of these, of the Intermediate Distribution Frames (IDF), which provides flexibility in allocating the subscriber's number to the line unit or equipment in the office that is to be associated with the particular line. These frames are located on each floor of a building;

5. Installing, repairing, servicing, or a combination of these, of the subpanels (blocks). The subpanels are connecting devices where large feed cables terminate at the distribution frames;

6. Installing, repairing common equipment or key service unit, or a combination of these. This equipment consists of a backboard assembly and an equipment mounting frame, which are utilized for connecting external telephones;

7. Installing, repairing, servicing of the instruments, terminals, and sets, or a combination of these. This equipment is at either end of a circuit, or at a subscriber's or user's terminal;

8. Installing, repairing, servicing, or a combination of these, of the ancillary or add-on equipment such as bells, buzzers,

speakerphones, headsets, automatic dialers, recorders; and

9. Installing, repairing, servicing of the telephone cable, or a combination of these. Telephone cable includes: network channel service cable; riser cables between floors of a building; distribution cables installed on each floor of a building in the floor or the ceiling, and inside wires between the telephone and the connection to the distribution cable;

(G) Electrician—Applies to workers who are responsible for installation, assembly, construction, inspection, operation, and repair of all electrical work within the property lines of any given property (manufacturing plants, commercial buildings, schools, hospitals, power plants, parking lots). This scope of work shall begin at the secondary site of the transformer when the transformer is furnished by the local utility and the service conductors are installed underground. When service conductors are installed overhead in open air from wooden poles, this scope of work shall start immediately after the first point of attachment to the buildings or structures. The work falling within this occupational title of work description includes:

1. Planning and layout of electrical systems that provide power and lighting in all structures. This includes cathodic protection systems utilized to protect structural steel in buildings and parking structures;

2. All handling, moving, loading, and unloading of any electrical materials, materials used in association with an electrical system, electrical equipment, and electrical apparatus on the job site, whether by hand or where power equipment and rigging are required;

3. Welding, burning, brazing, bending, drilling, and shaping of all copper, silver, aluminum, angle iron, and brackets to be used in connection with the installation and erection of electrical wiring and equipment;

4. Measuring, cutting, bending, threading, forming, assembling, and installing of all electrical raceways (conduit, wireways, cable trays), using tools, such as hacksaw, pipe threader, power saw, and conduit bender;

5. Installing wire in raceways (conduit, wireways, troughs, cable trays). This wire may be service conductors, feeder wiring, subfeeder wiring, branch circuit wiring;

6. Chasing and channeling necessary to complete any electrical work, including the fabrication and installation of duct banks and manholes incidental to electrical, electronic, data, fiber optic, and telecommunication installation;

7. Splicing wires by stripping insulation from terminal leads with knife or pliers, twisting or soldering wires together, and applying tape or terminal caps;

8. Installing and modifying of lighting fixtures. This includes athletic field lighting when installed on stadium structures or supports other than wooden poles, or both;

9. Installing and modifying of all electrical/fiber optic equipment (AC-DC motors, variable frequency drives, transformers, reactors, capacitors, motor generators, emergency generators, UPS equipment, data processing systems, and annunciator systems where sound is not a part thereof);

10. Installing of raceway systems utilizing conduit, conduit bodies, junction boxes, and device boxes for switches and receptacles. This also may include wiring systems utilizing other methods and materials approved by the *National Electrical Code* (MC cable, AC cable, BX, or flexible metal tubing or electrical nonmetallic tubing);

11. Installing of main service equipment, distribution panels, subpanels, branch circuit panels, motor starters, disconnect switches, and all other related items;

12. Installing and wiring of instrumentation and control devices as they pertain to heating, ventilating, air conditioning (HVAC) temperature control and energy management systems, building automation systems, and electrically or fiber optic operated fire/smoke detection systems where other building functions or systems are controlled;

13. Installing conduit or other raceway greater than ten feet (10') when used for the following: fire alarm systems, security systems, sound systems, closed circuit television systems or cable television systems, or any system requiring mechanical protection or metallic shielding (telephone systems);

14. Testing continuity of circuit to insure electrical compatibility and safety of components. This includes installation, inspecting, and testing of all grounding systems including those systems designed for lighting protection; and

15. Removing electrical systems, fixtures, conduit, wiring, equipment, equipment supports, or materials involved in the transmission and distribution of electricity within the parameters of the building property line if reuse of any of the existing electrical system is required. This may include the demolition and removal and disposal of the electrical system;

(H) Elevator Constructor—Applies to workers who assemble and install electric and hydraulic freight and passenger elevators, escalators, dumbwaiters, and moving walks. The work falling within this occupational title of work description includes:

1. The handling, unloading, and hoisting of all equipment to be assembled or installed by workers performing work within this occupational title of work description, from the time that equipment arrives at, or near the building site;

2. The wrecking or dismantling of elevator plants, to include elevators, escalators, dumbwaiters, moving walks, and all other equipment to be reused and assembled or installed by workers performing work within this occupational title of work description;

3. The sinking, drilling, boring, digging cylinder wells, or backfilling for hydraulic lifts, hydraulic elevators, or screw lifts;

4. The layout, erecting and assembling of all elevator equipment (for example, electric, hydraulic, steam, belt, compressed air, and hand-powered elevators; dumbwaiters, residence elevators, parking garage elevators), and the assembly of all escalators, moving walks and link belt carriers;

5. The erecting and assembly of all theater stage and curtain equipment and guides and rigging to them, organ consoles, and orchestra elevators;

6. The installing of all wiring, conduit, and raceways from the first point of attachment of main feeder terminals on the controller to other apparatus and operating circuits;

7. The operating of temporary cars; and

8. The installing of all elevator enclosures, fronts, fascias, sills, frames, and bucks;

(I) Glazier—Applies to workers who select, cut, prepare, handle, install, or remove all window glass, plate, and all other types of glass, including structural glass, mirror glass, tempered and laminated glass, safety or protection glass, all types of insulating glass units, all plastics or other similar materials when used in place of glass and when set or glazed with putty, moulding rubber, cement, lead, and all types of mastic, or other materials used in place of same. The workers performing work within this occupational title of work description install these materials in windows, louvers, doors, partitions, skylights, and on building fronts, walls, ceilings and tables, whether the materials are set in wood, stone, cement, or metal of all types. The work falling within the occupational title of work description includes:

1. The installing of mirrors of all types;

2. The marking of an outline or pattern on glass and cut glass with a glasscutter;

3. The breaking off of excess glass by hand or with a notched tool;

4. The fastening of glass panes into wood sash with glazier's points, and the spreading smooth of putty around the edge of panes with a knife to seal joints;

5. The installing of metal window and door frames into which glass panels are to be fitted or sliding windows. The bolting of metal hinges, handles, locks, and other hardware to prefabricated glass doors;

6. The installing of mirror or structural glass on building fronts, walls, ceilings or tables, using mastic, screws, or decorative moulding;

7. The installing of metal-framed glass enclosures for showers, bathtubs, and skylights; and

8. The installing, cutting, and removal of all window glass, plate, and all other types of glass, including structural glass, mirror glass, tempered and laminated glass, safety or protection glass, all types of insulating glass units, all plastics or other similar materials when used in place of glass and when set or glazed with putty, molding rubber, cement, lead, and all types of mastic, or other materials used in place of same;

(J) Ironworker—Applies to workers who perform work in connection with field fabrication, erection, or both, installation, removal, wrecking, and dismantling of structural, architectural, and reinforcing iron and steel, ornamental lead, bronze, brass, copper, and aluminum, and plastics or other materials when used in place of them. The work falling within the occupational title of work description includes:

1. Structural. The unloading, erecting, bolting-up, plumbing-up, welding, and installing of structural steel, including any field fabrication;

2. Reinforcing. The unloading, carrying, placing, and tying of all concrete reinforcing, such as re-bar, wire mesh, expanded metal or post tensioning cable (including the tension process) or prestress cables when installed on the job site;

3. Rigging. The unloading, moving, handling, placing, and setting of electrical machinery and equipment when rigging or power equipment, or both, is used (with the exception of setting of electric motors). The assembly and erection of radio and television and other structural steel towers (with the exception of electrical transmission towers). The unloading, handling, moving, and placing of machinery to be assembled or dismantled, erected, or installed to its approximate position (over the anchor bolts);

4. Windows. The installation of metal windows (with the exception of store fronts display windows), curtain walls, and metal panels. The caulking of metal-to-metal joints and metal-to-brick;

5. Doors. The erection of curtain type doors (overhead rolling-type doors), heavy industrial doors when made of metal, fire doors, and exterior metal hinged doors that carry a fire underwriters label are erected by iron workers;

6. Sheeting and decking. The installation of sheeting which is attached to metal framework including metal floor decking;

7. Metal buildings. The erection and installation of structural steel and sheet metal packaged buildings when they come in a package unit, such as Butler, Delta, Varco Prudent, or other name brand packaged buildings. The installation of all doors, windows, and insulation (when installed in conjunction with sheeting) in the packaged buildings. The installation of metal siding and metal roof decking, regardless of the fastening method or the object to which it is fastened;

8. Elevators. The installation of elevator doors for gates manually operated and all elevator enclosures, fronts, fascias, sills, frames, and bucks;

9. Precast. The unloading and installation/erection of precast bridge girders, single T's, double T's, top panels, and tilt-up slabs; and

10. Other. The installation of all catwalks, stairways, and hand rails made of aluminum, bronze, or any type of metal, glass or plastic. The installation of ornamental iron, such as revolving doors, gates, handrails, window grills, jail and cell work, and chain link fences. The installation of dry storage bins, hoppers, chutes, and conveyors where sand ore, coal, or any dry component is stored or transferred. The erection, installation, removal, wrecking, and dismantling of bridges, viaducts, cableways, tramway, monorail transportation systems. The erection, installation, removal, wrecking, and dismantling of locks, gates, metal forms, railings (including pipe). The erection, installation, removal, wrecking, and dismantling of frames in support of boilers. The installation of metal siding and metal roof decking, regardless of the fastening method, or the object to which it is fastened. The handling, burning, welding, and tying of all materials used to reinforce concrete structures. The installation and erection of TV and microwave towers, self-supporting towers, or guy towers. The installation of metal guardrails with metal posts and highway signage;

(K) General Laborer (including first semi-skilled laborer and second semi-skilled laborer)—Consists of providing routine manual labor. This work encompasses several subclassifications, with the title and work description considered in light of whether the public works project pertains to building construction or heavy/highway construction.

1. Building construction. The subtitles falling within the occupational title of work description for laborer, as applicable to building construction, are as follows:

A. Laborer. The work falling within this subtitle of work description includes:

(I) Being included in one (1) of the following categories: flagmen, heaters, material plant man, carpenter tender, landscaper, signalman, wrecker (old/new structures), form handler, or posthole digger;

(II) Cleaning and clearing of all debris for all crafts, loading and unloading, conveying, distributing, construction material by hand and collecting and hoisting debris, backfilling, grading, and landscaping by hand;

(III) Covering of tanks, structures, and material piles with tarpaulins or other materials. Cleaning of masonry and other type walls and windows. Signaling and hoisting concrete buckets and for all other material handled by workers falling within the occupational title of work description for laborer;

(IV) Providing drinking water. Handling and cleaning of concrete chutes. Cleaning of concrete spills and chipping where hand tools are required. Performance of work necessary in remedying defects in concrete caused by leakage, bulging, sagging, or shifting of forms when finishing tools are not used. Jackhammer and paving breaker, air compressors, motor buggies, pumps (removal of water), except set-up men and nozzle men, chipping tool operator, concrete mixer operator (up to and including two- (2-) bag capacity); and

(V) Laying nonpressurized pipe for downspout drain lines, header lines, or laying of nonpressurized conduit, or a combination of these, for the carrying of storm water, waste, sewage, gravity flow lines, catch basins and manholes, effluent lines, originating outside the building and all those lines originating inside the building at the first Y, T, or connection outside the building;

B. First semiskill laborer. The work falling within this subtitle of work description includes: hod-carriers, plasterers, and cement mason tenders (who assist bricklayers, plasterers, and cement masons). The mixing, packing, wheeling, and tempering of mortar and fire clay. The mixing, handling and conveying of all other materials used by bricklayers, plasterers, and cement masons (for example, brick, tile, stone and cast stone), whether done by hand or using a forklift (walk behind or similar types). Building of scaffolds, trestles, boxes, and swinging staging for bricklayers, plasterers, and cement masons; and

C. Second semiskill laborer. The work falling within this subtitle of work description includes: concrete pump set-up men and nozzle men, tile layers and bottom men, on sewers and drains, cutting torch, and burning bar (demolition), trench, or pier holes twelve feet (12') or over, wagon drill, air track or any mechanical drill, powder man, tamper, one hundred pounds (100 lbs.) or over, laborers working for mechanical and electric contractors (including but not limited to digging of all trenches, ditches, holes, paving of concrete, and cleaning of all trash),

paving breaker, jackhammer and vibrator, laser beam man for sewer, grade checker for roads and railroads, asbestos removal (except mechanical systems that are not being scrapped and any type of roofing where the roof is to be relaid), hazardous waste removal, disposal work, or any combination of these.

2. Heavy/highway construction. The subtitle falling within the occupational title of work description for general laborer, as applicable to heavy/highway construction, are as follows:

A. Laborer. The work falling within this subtitle of work description includes: carpenters tenders, salamander tenders, dump man, ticket takers, flagman, loading trucks under bins, hoppers and conveyors, track men, cement handler, dump man on earth fill, Georgia buggie man, material batch hopper man, spreader on asphalt machine, material mixer man (except on man holes), coffer dams, riprap pavers—rock, block, or brick, signal man for materials handled by laborers, scaffolds over ten feet (10') not self-supported from ground up, skipman on concrete paving, wire mesh setters on concrete paving, work in connection with nonpressurized pipelines, such as nonpressured sewer, water, gas, gasoline, oil, drainage pipe, conduit pipe, tile, and duct lines and other nonpressurized pipelines; power tool operator; work performed by hand in connection with hydraulic or general dredging operations, form setters (curb and gutter), puddlers (paving only), straw blower nozzleman, asphalt plant platform man, chuck tender, crusher feeder, men handling creosote ties or creosote materials, men working with and handling epoxy material(s), topper of standing trees, feeder man on wood pulverizers, board and willow mat weavers and cable tiers on river work, deck hands, guardrail and temporary signs, pile dike and revetment work, all laborers working on underground tunnels less than twenty-five feet (25') where compressed air is not used, abutment and pier hole men working six feet (6') or more below ground, men working in coffer dams for bridge piers and footings in the river, Barca tamper, Jackson or any other similar tamp, cutting torch man, liners, curb, gutters, ditchliners, hot mastic kettleman, hot tar applicator, hand blade operators and mortar men on brick or block manholes, rubbing concrete, air tool operator under sixty-five pounds (65 lbs.), caulker and led man, chain or concrete saw under fifteen horsepower (15 HP). The unloading, handling, and carrying of concrete reinforcing bars, by hand, to the areas in which they are used, wrecking, stripping, dismantling, cleaning, moving, and oiling of all concrete forms; digging and laying sewer tile; and

B. Skilled laborer. The work falling within this subtitle of work description includes: vibrator man, asphalt raker, head pipe layer on sewer work, batterboard man on pipe and ditch work, cliff scalers working from Bosun's chairs, scaffolds, or platforms on dams or power plants over ten feet (10') high, air tool operator over sixty-five pounds (65 lbs.), stringline man on concrete paving and the like, sandblast man, laser beam man, wagon drill, churn drill, air track drill, and all other similar type drills, jackhammers, and other pneumatic hammers and tampers, Gunite nozzle man, pressure grout man, screed man on asphalt, concrete saw fifteen (15) HP and over, grade checker, stringline man on electronic grade control, manhole builder, dynamite man, powder man, welder, tunnel man waterblaster—one thousand pounds per square inch (1000 psi) over, asbestos (except mechanical systems that are not being scrapped), hazardous waste removal, disposal, or any combination of these;

(L) Mason (which shall include marble mason, marble finisher, terrazzo worker, terrazzo finisher, tile setter, and tile finisher).

1. Marble Mason-Terazzo Worker—The work falling within the occupational title of work description for Marble Mason-Terazzo Worker includes:

A. The installing of marble, mosaic, venetian enamel, and terrazzo; the cutting and assembling of mosaics and art ceramics; the casting of all terrazzo on the job site; all rolling of terrazzo work;

B. The preparing, cutting, layering, or setting of metal, composition, or wooden strips and grounds on all bedding above concrete floors or walls; and the laying and cutting of metal, strips, lath, or other reinforcement, where used in terrazzo work;

C. The installing of cement terrazzo, magnesite terrazzo, dex-o-tex terrazzo, epoxy matrix terrazzo, exposed aggregate. Rustic or rough wash of exterior or interior of buildings. The mixturing or applying of any other kind of mixtures of plastics composed of chips or granules of marble, granite, blue stone, enamel, mother of pearl, quartz ceramic colored quartz, and all other kinds of chips or granules when mixed with cement, rubber, neoprene, vinyl, magnesium chloride, or any other resinous or chemical substances used for seamless flooring systems. The applying of binding materials when used on walls, floors, ceilings, stairs, saddles, or any other part of the interior or exterior of the building, or other work not considered a part of the building such as fountains, swimming pools;

D. The finishing of cement floors where additional aggregate of stone is added by spreading or sprinkling on top of the finished base and troweled or rolled into the finish and then the surface ground by grinding machines (When no additional stone aggregate is added to the finished mixture, even though the surface may be ground, the work falls within the occupational title of work description for cement masons.); and

E. The carving, cutting, and setting of all marble, slate, including slate backboards, stone, albereen, carrara, sanionyx, vitrolite, and similar opaque glass, scaglioa, marbleithic, and all artificial, imitation, or case marble of whatever thickness or dimension. This shall apply to all interior work, such as sanitary, decorative, and other purposes inside of buildings of every description wherever required, including all polish, honed, or sand finish.

2. Marble Finisher—The work falling within the occupational title of work description for Marble Finisher includes:

A. The preparation of floors and/or walls by scraping, sweeping, grinding, and related methods to prepare surface for Marble Mason installation of construction materials on floor and/or walls; the movement of marble installation materials, tools, machines, and work devices to work areas; the erection of scaffolding and related installation structures;

B. The movement of marble slabs for installation; the drilling of holes and the chiseling of channels in edges of marble slabs to install wall anchors, using power drill and chisel; the securing of marble anchors to studding, using and covering ends of anchors with plaster to secure anchors in place;

C. The supply and mixture of construction materials for Marble Mason; the mixture of grout, as required, following standard formulas and using manual or machine mixing methods; the application of grout to installed marble; the movement of mixed mortar or plaster to installation area, manually or using wheelbarrow;

D. The removal of excess grout, using wet sponge; the cleaning of installed marble surfaces, work and storage areas, installation tools, machinery, and work aids, using water and cleaning agents;

E. The modification of mixing, material moving, grouting, polishing, and cleaning metal pieces, using a torch, spatula, and heat sensitive adhesive and filler;

F. The removal of marble installation materials and related debris from immediate work area; the storing of marble, installation material tools, machines, and related items; and

G. The provision of assistance to Marble Mason with the following tasks: bending or forming of wire to form metal anchors, using pliers; inserting anchors into holes of marble slab; securing anchors in

place with wooden stakes and plaster; selecting marble slab for installation following numbered sequences or drawings; grinding and polishing marble, using abrasives, chemical and/or manual, in machine grinding and/or polishing techniques, under Marble Mason's direction; the moving and positioning of marble.

3. Terrazzo Finisher—The work falling within the occupational title of work description for Terrazzo Finisher includes:

A. The preparation of floors and/or walls by scraping, sweeping, grinding, and related methods to prepare surface for Terrazzo Worker installation of construction materials on floors, base, and/or walls; the moving of terrazzo installation materials, tools, machines, and work devices to area, manually or using wheelbarrow;

B. The supply and mixture of construction materials for Terrazzo Worker; the preparation, mixture by hand, mixture by mixing machine, or transportation of premixed materials and the distribution with shovel, rake, hoe, or pail, of all kinds of concrete foundations necessary for mosaic and terrazzo work; the dumping of mixed materials that form base or top surface of terrazzo into prepared installation site, using wheelbarrow; the measuring of designated amounts of ingredients for terrazzo or grout, using graduated containers and scale, following standard formulas and specifications, and the loading of portable mixer using proper means of transport; the mixture of materials according to experience and requests from Terrazzo Worker;

C. The spreading of marble chips or other material over fresh terrazzo surface and the pressing of the material into terrazzo by use of a roller; the application of grout finishes to surfaces of installed terrazzo; the spreading of grout across terrazzo to finish surface imperfections, using trowel; the installation of grinding stones in power grinders, using hand tools; the fine grinding and polishing of the surface of terrazzo, when grout has set, using power grinders; the application of curing agent to installed terrazzo to promote even curing, using brush or sprayer; the cutting of grooves in terrazzo stairs, using power grinder, and the filling of grooves with nonskid material;

D. The modification of mixing, grouting, grinding, and cleaning position and the securing of moisture membrane and wire mesh prior to pouring base materials for terrazzo installation;

E. The washing of the surface of polished terrazzo, using cleaner and water, and the application of sealer, according to manufacturer specifications, using brush; the cleaning of the installation site, and storage areas, tools, machines, and equipment; the removal of Terrazzo Worker materials and related debris from immediate work area; and

F. The provision of assistance to Terrazzo Worker with the following tasks: grinding surfaces of cured terrazzo; using power grinders.

4. Tile Setter—The work falling within the occupational title of work description for Tile Setter includes:

A. The application of tile to floors, walls, ceilings, stair treads, promenade roof decks, garden walks, swimming pools, and all places where tiles may be used to form a finished surface for practical use, sanitary finish, or decorative purpose. (Tile includes all burned clay products, as used in the tile industry, either glazed or unglazed, all composition materials; all substitute materials in single units up to and including, fifteen inches by twenty inches by two inches (15" × 20"× 2") (except quarry tiles larger than nine inches by eleven inches (9" × 11")) and all mixtures in the form of cement, plastics, and metals that are used as a finished surface.);

B. The cutting and shaping of tile with saws, tile cutters, and biters; and

C. The positioning of tile and tapping it with a trowel handle to affix tile to plaster or adhesive base.

5. Tile Finisher—The work falling within the occupational title of work description for Tile Finisher includes:

A. The preparation of floors and/or walls by scraping, sweeping, grinding, and related methods for Tile Setter to install construction materials on floors and walls; the movement of tiles, tile setting tools, and work devices from storage area to installation site manually or using wheelbarrow;

B. The supply and mixture of materials for Tile Setter; the supply and mixture of construction materials for Tile Setter; the mixture of mortar and grout accordingly to standard formulas and request from Tile Setter using bucket, water hose, spatulas, and portable mixer; the modification of mixing, grouting, grinding, and cleaning procedures according to type of installation or material used; the supply to Tile Setter of mortar, using wheelbarrow and shovel; the application of grout between joints of installed tile, using grouting trowel; the application of grout; the cutting of installed tile;

C. The removal of excess grout from tile joints with a sponge and scraping of corners and crevices with a trowel; the application of caulk, sealers, acid, steam, or related agents to caulk, seal, or clean installed tile, using various application devices and equipment;

D. The wiping of surfaces of tile after grouting to remove grout residue and polish tile, using non-abrasive materials; the removal of Tile Setter materials and related debris from immediate work area; the cleaning of installation site, mixing and storage tools, and equipment, using water and various cleaning tools; the storing of tile setting material machines, tools, and equipment; and

E. The provision of assistance to Tile Setter to secure position of metal lath, wire mesh, felt paper, Dur/rock or wonderboard prior to installation of tile;

(M) Operating Engineer (which shall include operating engineer group I, operating engineer group II, operating engineer group III, operating engineer group III-A, operating engineer group IV, and operating engineer group V)—Applies to workers who perform work falling within the occupational title of work description for operating engineer/portable and hoisting operator, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment. This occupational title encompasses several subclassifications, with the title and work description considered in light of whether the public works project pertains to building construction or heavy/highway construction.

1. Building construction. The subtitles falling within the occupational title of work description for operating engineer, as applicable to building construction, are as follows:

A. Group I—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: crane (for example, crawler or truck); dragline—clam shell—gradall; Derrick (all types); kimmer scoop; power shovel or backhoe over one (1) cubic yard; pile driver (for example, land or floating); Whirley; mechanic and welder; hydraulic, self-propelled crane; stinger or cherry picker crane; switch boat; concrete portable plant/concrete mixer paver; cableways;

B. Group II—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: asphalt paver and spreader/concrete spreader; asphalt plant mixer operators; asphalt plant operator; backfillers; back hoe (under one (1) cubic yard); Barber-Green loader (similar type); blade—power, all types; boats—power; boilers; boring machine (all types, including tunnel boring); brooms—power operated (all types); concrete saw (self-propelled); chip spreader (front man); clef plane operators; combination concrete hoist and mixer such as mix or mobile; crab—power operated; crusher rock; ditching machine; dozer/dredges;

finishing machine; firemen on rigs; flex plane; floating machine; form grader; greaser; hoist operator (all types); hopper—power operated; hydra hammer (all types); Lad-A-Vator—similar type; loaders—all types, including skid-steer (for example, Bobcat); locomotives (all types); curb finish- ing machine; mucking machine; orange peels; pumps (all types); push cats; rollers (all types); scoops (all types except skimmer scoop); self-propelled rotary drill; air compressors (all types); side boom; siphons, jets, and jennies; welding machine; subgrader; testhole machine; throttle man tractors over fifty (50) HP; air tugger with air compressor; anchor placing barge; Ahoy force feeder loader (self-propelled); bull float; pipe cleaning/wrapping machine; conveyor; heaters, fuel fired with forced air; quadtrack; tie tamper; vibrating machine; well drilling machine; forklift (except masonry forklift);

C. Group III—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: tractors (under fifty (50) HP); distributor (bituminous); scissor lift; small machine (operator); mud jack; wench truck operator; pug mill operator; elevator-push button; A-frame truck; mixers; oilers;

D. Group III-A—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as a masonry forklift;

E. Group IV—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as a self-propelled floor sweeper; and

F. Group V—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: elevator—auto; air pressure oiler; air pressure engineer.

2. Heavy/highway construction. The subtitles falling within the occupational title of work description for operating engineer, as applicable to heavy/highway construction, are as follows:

A. Group I—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: asphalt finishing machine and trench; widening spreader; asphalt plant console operator; autograder; automatic slipform paver; backhoe; blade operator (all types); boat operator (all types); boilers—two (2); central mix concrete plant operator; clamshell operator; concrete mixer paver; crane operator; Derrick or Derrick trucks; ditching machine; dozer operator; dragline operator; dredge booster pump; dredge engineman; dredge operator; drill cat with compressor mounted on cat; drilling or boring machine rotary self-propelled; high-loader including skid steer (for example, Bobcat); hoisting engine—two (2) active drums; launchhammer wheel; locomotive operator—standard gauge; mechanics and welders; mucking machine; piledriver operator; Pitman crane operator; push cat operator; quadtrack; scoop operator—all types; shovel operator; sideboom cats; skimmer scoop operator; trenching machine operator; truck crane;

B. Group II—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: A-frame truck; asphalt hot mix silo; asphalt plant fireman, drum or boiler; asphalt plant mixer operator; asphalt plant man; asphalt roller operator; backfiller operator; Barber-Greene loader; chip spreader; concrete mixer operator, skip loader; concrete plant operator; concrete pump operator; crusher operator; dredge oiler; elevating grader operator; forklift; greaser—fleet; hoisting engine—one (1); locomotive operator—narrow gauge; multiple compactor; pavement breaker; power-broom—self-propelled; power shield; rooter; side discharge concrete spreader; slip form finishing machine; stumpcutter machine; throttle man; tractor operator—over fifty (50) HP; winch truck;

C. Group III—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as follows: boilers—one (1); chip spreader (front man); churn drill operator; clef plane operator; concrete saw operator self-propelled; curb finishing machine; distributor operator; finishing machine operator; flex plane operator; float operator; form grader operator; pugmill operator; roller operator, other than high-type asphalt; screening and washing plant operator; siphons and jets; subgrading machine operator; spreader box operator, self-propelled (not asphalt); tank car heater operator—combination boiler and booster; tractor operator fifty (50) HP or less; Ulmac, Ulric, or similar spreader; vibrating machine operator, not hand;

D. Group IV—This subtitle applies to workers who operate, monitor, and control, repair, modify, assemble, erect, oil, service each or all electrically or electronically, hydraulically, or any power-operated equipment set forth as an oiler or oiler-driver (fireman—rig; maintenance operator);

(N) Outside- lineman, lineman operator, groundman, lineman tree trimmer, groundman tree trimmer, and any combination thereof.

1. Outside-lineman—Applies to workers who erect and repair transmission poles (whether built of wood, metal, or other material), fabricated metal transmission towers, outdoor substations, switch racks, or similar electrical structures, electric cables, and related auxiliary equipment for high-voltage transmission and distribution powerlines used to conduct energy between generating stations, substations, and consumers. The work (overhead and underground) falling within this occupational title of work description includes:

A. Construction, repair, or dismantling of all overhead and underground electrical installations. The handling and operation of all equipment used to transport men, tools, and materials to and from the job site. The framing, trenching, digging, and backfilling of vaults, holes and poles, and anchors (by hand or mechanical equipment), guying, fastening to the stub-in on concrete footings or pads, assembling of the grillage, grounding of all structures, stringing overhead wire, installing underground wire, splicing, and installation of transformers;

B. Construction and repair of highway and street lighting and traffic signal systems, cathodic protection systems, and ball field lighting systems;

2. Lineman operator—Operates equipment used on the outside line portion of a project. The lineman operator assists linemen in the performance of their work but does not climb or work out of any type of aerial lift equipment. The lineman operator does not perform any work that requires the use of hand tools;

3. Groundman—Work performed on the ground to assist the journeymen outside line construction/lineman on work not energized. Groundmen use jack hammers, air drills, shovels, picks, tamps, trenching equipment, and other such tools for excavating and/or compacting dirt or rock on the outside line portion of a project but do not use hand tools;

4. Lineman tree trimmer—Trimming and removal of trees, stumps, limbs, brush, and other related tasks in and around electrical systems by use of chainsaws, pruners, pole saws, and hand saws only when specifically required to provide clearance and right-of-way preparation for installation of overhead or underground high-voltage electric

utility lines, and excluding the clearance of right-of-ways related to heavy-highway construction or other public projects not directly related to the installation of electrical utility lines. Lineman tree trimmer work may be performed on the ground and in the air; and

5. Groundman tree trimmer—Assists the lineman tree trimmer in the performance of their work using rakes, chainsaws, chippers, and industrial mowers in and around electrical systems only when specifically required to provide clearance and right-of-way preparation for installation of overhead or underground high-voltage electric utility lines, and excluding the clearance of right-of-ways related to heavy-highway construction or other public projects not directly related to the installation of electrical utility lines. Groundman tree trimmer work is only performed on the ground;

(O) Painter—The work falling within the occupational title of work description for painter includes:

1. Preparation of surfaces. The washing, cleaning, pointing, and taping of drywall, regardless of material used, and smoothing of surfaces, using sandpaper, brushes, or steel wool. The removal of old paint or other coatings from surfaces, using paint remover, scraper, wire brushing, sandblasting, water blasting, liquid steam, or by any other similar process. The filling of nail holes, cracks, and joints with putty, plaster, or other fillers;

2. Color matching and mixing. The application of paint, varnish, stain, enamel, lacquer, vinyl, wallpaper, and other materials of whatever kind of quality applied to walls or ceilings with paste or adhesive, using brushes, spray gun (spray painter), or paint rollers. The application of polyurethane elastomers, vinyl plastics, neoprene, resin, polyester, and epoxy as waterproofing or protective coatings to any kind of surface (except roofs) when applied with brushes, spray guns, or rollers;

3. Texturing and decorating. The erecting of scaffolding or setting up of ladders to perform the work above ground level. The paperhanging of walls and ceilings with decorative wall coverings made of fabric, vinyl, or paper. The preparing of the surface to be covered by applying sizing, which seals the surface and makes the covering stick better. The removal of the old covering by soaking, steaming, or applying solvents. The patching of holes and other imperfections before applying the new wall covering. The measuring of the area to be covered; the cutting of the covering into strips of the proper size, the checking of the covering for flaws and the examination of the pattern so it can be matched when the strips are hung. The preparation of paste or other adhesives according to manufacturers' directions, and the brushing or rolling it on the covering. The placing of the strips on the wall or ceiling, to match adjacent patterns. The smoothing of the strips to remove bubbles and wrinkles; the trimming of the top and bottom with a razor blade; and the painting or taping of highway striping, or both; and

4. Cleanup. The cleanup of tools and equipment required in connection with work falling within this occupational title;

(P) Plumber (which shall include pipe fitter).

1. General Plumber—Applies to workers who install and repair domestic potable water lines, gravity waste disposal systems inside the curb or fence lines, plumbing fixtures such as: bathtubs, sinks, and toilets—and appliances such as, dishwashers and water heaters. The work falling within the occupational title of work description for plumber includes:

A. Assembling and installing piping systems, fixtures and equipment for the transportation of domestic water and sewage. Piping systems installed in structures (for example, buildings, industrial plants) to the first Y, T, or connection located outside the building;

B. Cutting, threading, and bending pipe. Joining pipes by use of screws, bolts, fittings, solder, welding brazing, and caulking or any other method of making joints in the plumbing industry;

C. Assembling, installing, and repairing valves, pipe fittings, and pumps. Testing the piping system. Installing and repairing plumbing fixtures, such as sinks, bathtubs, water heaters, and water softeners; and

D. Cutting holes in floors and walls for pipes with point and hammer, core drill, or both.

2. Pipe Fitter—Applies to workers who fabricate, install, and repair piping systems to include: water and waste processing systems; heating and air-conditioning systems, pneumatic controls, and pneumatic delivery systems; powerhouse and all pressurized piping systems; gas, oxygen systems; gasoline systems not for public sale. The work falling within this occupational title of work description includes:

A. Piping systems installed in structures (for example, buildings, industrial plants, and the like);

B. Cutting, threading, and bending pipe. Joining pipes by use of screws, bolts, fittings, solder, welding, and caulking, or any other method of making joints in the pipefitting industry;

C. Assembling, installing, and repairing valves, pipe fittings, and pumps. Testing the piping system. Cutting holes in floors and walls for pipes with point and hammer, core-drill, or both;

D. Installing of distribution lines (for example, water mains, sewer mains, oil and gas lines);

E. Welding of steel pipe joints and joining pipes with screws, bolts, fittings, solder, caulking, or any other method for making joints in the industry; and

F. Joining ductile iron and plastic pipes by using any method for making joints in the industry, when the pipe will be under pressure;

(Q) Roofer—Applies to workers who apply and install any and all types of roofing materials, other than sheet metal. The work falling within this occupational title of work description includes:

1. The installation of slate and tile and all substitute materials taking the place of slate and tile used for roofing including flat or promenade slate, with necessary metal flashing to make water-tight;

2. The cementing in, on, or around slate and tile roofs. The laying of felt or paper beneath the slate and tile. The dressing, punching, and cutting of all roof slate or tile either by hand or machinery;

3. The installation of all forms of plastic, slate, slag, gravel; asphalt and composition roofing; rock asphalt mastic when used for damp and waterproofing; prepared paper; compressed paper and chemically prepared paper, and burlap with or without coating. The installation of all damp resisting preparations regardless of the method of application in or outside of building. The installation of damp courses, sheeting, or coating on foundation work and tarred roofs. The laying of the tile or brick, when laid in asphalt or pitch tar;

4. The installation and application of new materials used in roofing, water-proofing, encapsulation, and containment process including all forms of elastomeric or plastic (elastoplastic), or both, roofing systems, both sheet and liquid applied, whether single-ply or multi-ply. The installation of aggregates or stone, used as a ballast for inverted roofing membrane assembly, or roof of similar construction where insulation is laid over the roofing membrane. The sealing and caulking of seams and joints on these elastoplastic systems to insure water-tightness. The applying of liquid-type elastoplastic preparation for roofing, damp, or waterproofing when applied with a squeegee, trowel, roller, or spray equipment whether applied inside or outside of a building. The priming of surfaces to be roofed, damp, or waterproofed, whether done by roller, mop, swab, three- (3-) knot brush, or spray systems. The waterproofing of all types of preformed panels;

5. The application of all types of spray-in-place such as urethane or polyurethane, and the coatings that are

applied over them;

6. The application of roof insulation, when the insulation material is applied as an integral part of the roofing system, whether the insulation material is applied as the first, last, or any other layer in between;

7. The operation and servicing of all kettles, bulk tankers, stationary heating tankers, and other types of equipment and tools used to accomplish this work (including heating systems for the operation of the equipment); and compressors for applying roofing material components, roof and mop carts, hydraulics, tools and equipment, be it hand or power, needed to apply waterproofing, insulated, and roofing materials;

8. The handling, hoisting, and storing of all roofing, damp, and waterproofing materials; and

9. The tear-off, removal, or both, of any type of roofing, all spudding, sweeping, vacuuming, cleanup, or a combination of these, of any areas of any type where a roof is to be relayed;

(R) Sheet Metal Worker—The work falling within the occupational title of sheet metal worker includes:

1. The handling, conditioning, assembling, installing, servicing, repairing, altering, and dismantling of the duct work for the heating, ventilation, and air-conditioning systems regardless of the materials used and the setting of all equipment and all supports and reinforcements in connection with the system;

2. The installation of expansion and discharge valves, air filters, and water filters in heating, ventilation, and air-conditioning systems;

3. The testing and balancing of air-handling equipment and duct work;

4. The forming, rolling, drawing, stamping, or pressing of sheet metal shingles, sheet metal tile, sheet metal brick, sheet metal stone, and sheet metal lumber, when specified for use as roofing, siding, waterproofing, weather proofing, fire proofing, or for ornamental or any other purpose;

5. The performing of sheet metal work specified for use in connection with or incidental to steeples, domes, minarets, look outs, dormers, louvers, ridges, copings, roofing, decking, hips, valleys, gutters, outlets, roof flanges, flashings, gravel stops, leader heads, down spouts, mansards, balustrades, skylights, cornice moulding, columns, capitals, panels, pilasters, mullions, spandrils, and any and all other shapes, forms and design of sheet metal work specified for use for waterproofing, weatherproofing, fire proofing, ornamental, decorative, or display purposes, or as trim on exterior of the buildings;

6. The installing of sheet metal ceilings with cornices and mouldings of plain, ornamental, enameled, glazed, or acoustic type;

7. The installing of side walls, wainscoting of plain, ornamental, enameled, or glazed types, including sheet metal tile;

8. The application of all necessary wood or metal furring, plastic, or other materials, to which they are directly applied;

9. The performing of sheet-metal work specified for use in connection with or incidental to direct, indirect, or other types of heating, ventilating, air-conditioning, and cooling systems (including risers, stacks, ducts, S strips, fittings, dampers, casings, recess boxes, outlets, radiator enclosures, exhausts, ventilators, frames, grisses, louvers, registers, cabinets, fans, and motors);

10. The air washers, filters, air brushes, housings, air-conditioning chambers;

11. The setting and hanging of air-conditioning units, unit heaters or air-veyor systems, and air handling systems regardless of material used;

12. The assembling and setting up of all cast iron parts, warm air furnace, all stoker, gas, and oil burner equipment used in connection with warm air heating, all sheet metal hoods, casings, wall stacks, smoke pipes, truck lines, cold air intake, air chambers, vent pipes, frames, registers, dampers, and regulation devices;

13. The installing of equipment utilized in the operation of kitchens including ranges, canopies, steam tables, work tables, dishwashers, coffee urns, soda fountains, warming closets, sinks, drainboards, garbage chutes, incinerators, and refrigerators;

14. The installing of tubing, pipes, and fittings, used in connection with or incidental to coppersmithing work. The installation of fume hoods, metal toilet partitions, metal lockers, plain metal shelving; and

15. The handling, moving, hoisting, and storing of all sheet metal materials on the job site, where power equipment and rigging are required;

(S) Sprinkler Fitter—Applies to workers who perform the installation, adjustments, and corrections, repair, and dismantling of all fire protection and fire control systems and the installation of all fire piping for tubing, appurtenances, and equipment. The work falling within the occupational title includes: The handling and installation of all piping and appurtenances pertaining to sprinkler equipment, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes, and hose connections to the sprinkler systems, sprinkler tank heaters, air lines and thermal systems used in connection with sprinkler and alarm systems, tank and pump connections, and fire protection systems using mulsifyre, spray, water, fog, carbon dioxide (CO_2), gas and foam and dry chemical systems; and

(T) Truck Driver (which shall include truck control service driver, truck driver group I, truck driver group II, truck driver group III, and truck driver group IV)—The workers who perform work falling within the occupational title of work description for truck driver includes the operation, repair, and servicing of the following mechanical equipment. This occupational title encompasses several subclassifications, with the title and work description considered in light of whether the public works project pertains to building construction or heavy/highway construction.

1. Building construction. The subtitles falling within the occupational title of work description for truck driver, as applicable to building construction, are as follows:

A. Truck control service driver – Applies to workers who perform work including:

(I) The delivery, installation, and pickup of traffic control devices;

(II) The unloading and installation of barricades, plastic channelizer drums, safety cones, and temporary flashing lights not to exceed one hundred fifteen (115) volts;

(III) Regular periodic inspections to assure that traffic control devices are clean, clearly visible, and properly positioned. Inspection and maintenance includes replacing batteries and bulbs in lights, cleaning reflective material and lenses, and repairing or replacing damaged or missing devices when incidental to and part of a public works construction project; and

(IV) Removal of all traffic control devices by loading them on a truck and driving them to a storage yard where they are unloaded;

B. Group I—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: flat bed trucks single axle, station wagons, pick-up trucks, material trucks single axle, tank wagon single axle;

C. Group II—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: agitator and transit mix-trucks;

D. Group III—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: flat bed trucks tandem axle, articulated dump trucks, material trucks tandem axle, tank wagon tandem axle; and

E. Group IV—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the

following equipment: semi and/or pole trailers, winch, fork and steel trucks, distributor drivers and operators, tank wagon semi-trailer, Insley wagons, dumpsters, halftracks, speedace, euclids, and other similar equipment, A-frame and Derrick trucks, float or low boy, and boom truck.

2. Heavy/highway construction. The subtitles falling within the occupational title work description for truck driver, as applicable to heavy/highway construction, are as follows:

A. Truck control service driver – Applies to workers who perform work including:

(I) The delivery, installation, and pickup of traffic control devices;

(II) The unloading and installation of barricades, plastic channelizer drums, safety cones, and temporary flashing lights not to exceed one hundred fifteen (115) volts;

(III) Regular periodic inspections to assure that traffic control devices are clean, clearly visible, and properly positioned. Inspection and maintenance includes replacing batteries and bulbs in lights, cleaning reflective material and lenses, and repairing or replacing damaged or missing devices when incidental to and part of a public works construction project; and

(IV) Removal of all traffic control devices by loading them on a truck and driving them to a storage yard where they are unloaded;

B. Group I—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: flat bed trucks single axle, station wagons, pick-up trucks, material trucks single axle, tank wagon single axle;

C. Group II—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: agitator and transit mix-trucks;

D. Group III—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: flat bed trucks tandem axle, articulated dump trucks, material trucks tandem axle, tank wagon tandem axle; and

E. Group IV—This subtitle applies to workers who operate, monitor, control, repair, modify, assemble, erect, oil, and service the following equipment: semi-and/or pole trailers, winch, fork and steel trucks, distributor drivers and operators, tank wagon semi-trailer, Insley wagons, dumpsters, halftracks, speedace, euclids, and other similar equipment, A-frame and Derrick trucks, float or low boy, and boom truck.

AUTHORITY: section 290.240.2., RSMo Supp. 2018. Original rule filed Sept. 15, 1992, effective May 6, 1993. Emergency amendment filed April 30, 1993, effective May 10, 1993, expired Aug. 28, 1993. Amended: Filed Aug. 13, 1996, effective Feb. 28, 1997. Amended: Filed Jan. 22, 1997, effective Sept. 30, 1997. Amended: Filed June 17, 2004, effective Dec. 30, 2004. Amended: Filed Aug. 19, 2010, effective Feb. 28, 2011. Amended: Filed Aug. 9, 2012, effective Feb. 28, 2013. Emergency amendment filed Nov. 7, 2014, effective Nov. 17, 2014, expired May 15, 2015. Amended: Filed Nov. 7, 2014, effective April 30, 2015. Emergency amendment filed Nov. 21, 2018, effective Dec. 1, 2018, expired May 29, 2019. Amended: Filed Nov. 21, 2018, effective July 30, 2019.*

**Original authority: 290.240, RSMo 1957, amended 1969, 2018.*

Missouri
Division of Labor Standards
WAGE AND HOUR SECTION

MIKE KEHOE, Governor

Annual Wage Order No. 33

Section 055
LAWRENCE COUNTY

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

Original Signed by
Logan Hobbs, Director
Division of Labor Standards

Filed With Secretary of State: **March 10, 2026**

Last Date Objections May Be Filed: **April 9, 2026**

Prepared by Missouri Department of Labor and Industrial Relations

Building Construction Rates For **Section 055**

LAWRENCE COUNTY

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	$26.81
Boilermaker	$27.94*
Bricklayer - Stone Mason	$58.33
Carpenter	$63.21
Lather	
Linoleum Layers & Cutter	
Millwright	
Pile Driver	
Cement Mason	$27.94*
Plasterer	
Communication Technician	$27.94*
Electrician (Inside Wireman)	$57.01
Electrician (Outside Lineman)	$27.94*
Outside - Groundman	
Outside - Groundman Tree Trimmer	
Outside - Lineman Operator	
Outside - Lineman Tree Trimmer	
Elevator Constructor	$27.94*
Glazier	$27.94*
Iron Worker	$74.85
Laborer	$44.04
Laborer - First Semi-Skilled	
Laborer - General	
Laborer - Second Semi-Skilled	
Laborer - Skilled	
Mason	$27.94*
Marble Finisher	
Marble Mason	
Terrazzo Finisher	
Terrazzo Worker	
Tile Finisher	
Tile Setter	
Operating Engineer	$27.94*
Operating Engineer - Group I	
Operating Engineer - Group II	
Operating Engineer - Group III	
Operating Engineer - Group III - A	
Operating Engineer - Group IV	
Operating Engineer - Group V	
Painter	$27.94*
Plumber	$56.77
Pipe Fitter	
Roofer/WaterProofer	$47.23
Sheet Metal Worker	$54.04
Sprinkler Fitter - Fire Protection	$27.94*
Truck Driver	$27.94*
Truck Control Service Driver	
Truck Driver, Teamsters Group I	
Truck Driver, Teamsters Group II	
Truck Driver, Teamsters Group III	
Truck Driver, Teamsters Group IV	

*** The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The 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 as defined in RSMo Section 290.210.**

Heavy Construction Rates For **Section 055**

LAWRENCE COUNTY

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	$27.94*
Millwright	
Pile Driver	
Electrician (Outside Lineman)	$27.94*
Outside - Groundman	
Outside - Groundman Tree Trimmer	
Outside - Lineman Operator	
Outside - Lineman Tree Trimmer	
Laborer	$27.94*
Laborer - General	
Laborer - Skilled	
Operating Engineer	$27.94*
Operating Engineer - Group I	
Operating Engineer - Group II	
Operating Engineer - Group III	
Operating Engineer - Group IV	
Truck Driver	$27.94*
Truck Control Service Driver	
Truck Driver, Teamsters Group I	
Truck Driver, Teamsters Group II	
Truck Driver, Teamsters Group III	
Truck Driver, Teamsters Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance iwth 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 shown on the Building Construction Rate Sheet.

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

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

OVERTIME
and
HOLIDAYS

OVERTIME

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

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

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

HOLIDAYS

January first;
The last Monday in May;
July fourth;
The first Monday in September;
November eleventh;
The fourth Thursday in November; and
December twenty-fifth;

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

Missouri
Division of Labor Standards
WAGE AND HOUR SECTION

MIKE KEHOE, Governor

Annual Wage Order No. 33

Section 005
BARRY COUNTY

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

Original Signed by
Logan Hobbs, Director
Division of Labor Standards

Filed With Secretary of State: **March 10, 2026**

Last Date Objections May Be Filed: **April 9, 2026**

Prepared by Missouri Department of Labor and Industrial Relations

Building Construction Rates For **Section 005**

BARRY COUNTY

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	$27.60*
Boilermaker	$27.60*
Bricklayer - Stone Mason	$27.60*
Carpenter	$53.06
Lather	
Linoleum Layers & Cutter	
Millwright	
Pile Driver	
Cement Mason	$27.60*
Plasterer	
Communication Technician	$27.60*
Electrician (Inside Wireman)	$59.98
Electrician (Outside Lineman)	$27.60*
Outside - Groundman	
Outside - Groundman Tree Trimmer	
Outside - Lineman Operator	
Outside - Lineman Tree Trimmer	
Elevator Constructor	$27.60*
Glazier	$27.60*
Iron Worker	$27.60*
Laborer	$27.60*
Laborer - First Semi-Skilled	
Laborer - General	
Laborer - Second Semi-Skilled	
Laborer - Skilled	
Mason	$27.60*
Marble Finisher	
Marble Mason	
Terrazzo Finisher	
Terrazzo Worker	
Tile Finisher	
Tile Setter	
Operating Engineer	$27.60*
Operating Engineer - Group I	
Operating Engineer - Group II	
Operating Engineer - Group III	
Operating Engineer - Group III - A	
Operating Engineer - Group IV	
Operating Engineer - Group V	
Painter	$27.60*
Plumber	$27.60*
Pipe Fitter	
Roofer/WaterProofer	$27.60*
Sheet Metal Worker	$27.60*
Sprinkler Fitter - Fire Protection	$27.60*
Truck Driver	$27.60*
Truck Control Service Driver	
Truck Driver, Teamsters Group I	
Truck Driver, Teamsters Group II	
Truck Driver, Teamsters Group III	
Truck Driver, Teamsters Group IV	

*** The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The 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 as defined in RSMo Section 290.210.**

Heavy Construction Rates For **Section 005**

BARRY COUNTY

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	$27.60*
Millwright	
Pile Driver	
Electrician (Outside Lineman)	$27.60*
Outside - Groundman	
Outside - Groundman Tree Trimmer	
Outside - Lineman Operator	
Outside - Lineman Tree Trimmer	
Laborer	$27.60*
Laborer - General	
Laborer - Skilled	
Operating Engineer	$27.60*
Operating Engineer - Group I	
Operating Engineer - Group II	
Operating Engineer - Group III	
Operating Engineer - Group IV	
Truck Driver	$27.60*
Truck Control Service Driver	
Truck Driver, Teamsters Group I	
Truck Driver, Teamsters Group II	
Truck Driver, Teamsters Group III	
Truck Driver, Teamsters Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance iwth 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 shown on the Building Construction Rate Sheet.

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

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

OVERTIME
and
HOLIDAYS

OVERTIME

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

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

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

HOLIDAYS

January first;
The last Monday in May;
July fourth;
The first Monday in September;
November eleventh;
The fourth Thursday in November; and
December twenty-fifth;

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

TECHNICAL SPECIFICATIONS

FOR

SANITARY SEWER COLLECTION SYSTEM IMPROVEMENTS
CITY OF MONETT, MISSIOURI

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DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01100 - GENERAL PROJECT REQUIREMENTS

PART 1: GENERAL

1.1. SCOPE.

A. This section covers the general project requirements for the Monett Sanitary Sewer Collection System Improvements project including CIPP trenchless rehabilitation, open-cut point repairs, and CIPP lateral liner rehabilitation.

1.2. OFFSITE STORAGE

A. Offsite storage arrangements shall be approved by the Owner for all materials and equipment not incorporated into the Work, but included in Applications for Payment. Such offsite storage arrangements shall be presented in writing and shall afford adequate and satisfactory security and protection. Offsite storage facilities shall be accessible to Owner.

1.3. PREPARATION FOR SHIPMENT.

A. All materials and equipment incorporated into the design shall be suitably packaged to facilitate handling and protect against damage during transit and storage. Painted surfaces shall be protected against impact, abrasion, discoloration, and other damage. All painted surfaces, which are damaged prior to acceptance of materials and equipment, shall be repainted to the satisfaction of the Engineer.

B. Each item, package, bundle of material, or piece of equipment shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment.

1.4. EASEMENTS AND RIGHTS-OF-WAY.

A. The Owner will provide rights-of-way necessary for where it is in public thoroughfares, city streets, Park Board property, county roads, state highways, or where it crosses private property. The Contractor shall confine his construction operations to the immediate vicinity of the location shown on the Plans, and shall use due care in placing construction tools, equipment, excavated materials, and pipe materials and supplies so as to cause the least possible damage to property and least interference with public traffic.

1.5. ON PRIVATE PROPERTY.

A. The Contractor shall confine his construction operations to the immediate vicinity of the location shown on the Plans, and shall use due care in placing construction tools, equipment, excavated materials, and pipe materials and supplies so as to cause the least possible damage to property and least interference with public traffic.

1. On Private Property. Contractor shall set stakes to mark the boundaries of construction easements across private property. The stakes shall be protected and

maintained until completion of construction. After cleanup has been completed the Contractor shall remove all construction stakes.

2. Contractor shall not enter any private property outside the designated construction easement boundaries without written permission from the owner of the property.

B. Should it become necessary that the Contractor use or occupy the land outside the Owner's right-of-way and/or easement, the Contractor shall obtain written consent from or execute a written agreement with the owner and tenant of such permitting operation. The Contractor shall neither enter for pipe delivery nor occupy for any other purpose with men, tools, equipment, construction materials, or excavated materials any private property outside the right-of-way and/or easement boundaries without such written permission from the owner and tenant of the entered or occupied property. Each owner and tenant of land or other property so occupied shall be notified by the Contractor not less than two (2) days prior to such occupation.

C. Whenever the easement is occupied by crops which will be damaged by construction operations, Contractor shall notify the owner sufficiently in advance so that the crops may be removed before excavation or trenching is started. Contractor shall be responsible for all damage to crops outside the easement and shall make satisfactory settlement for the damage directly with the property owner.

D. Where the line crosses fields that are leveled for irrigation or terraced, Contractor shall relevel irrigated fields and replace all terraces to their original or better condition, and to the satisfaction of the property owner.

1.6. CROSSING STATE HIGHWAYS.

A. The Contractor shall secure the necessary permit(s) and post bond as required for the construction within the limits of the highway right-of-way. All work within the right-of-way shall be strictly in conformance with the Missouri Department of Transportation Regulations. The permit must be secured before any construction is started within the highway right-of-way.

1.7. STREAM CROSSINGS

A. Stream and drainage ditch crossings shall be made in accordance with the applicable Specifications and details shown on the Plans.

B. The trench width shall be as required for proper pipe installation and the trench depth shall be as required to give minimum cover as shown on the Plans. Pipe encasement; where required, shall be in accordance with the Specifications and placed as indicated on the Plans.

C. The construction of buried riprap for erosion prevention of ditch slopes will be required at locations shown on the Plans.

D. The rock used for riprap shall be hard durable stone, as specified in the plans and specifications.

E. The Contractor shall furnish all labor, equipment, and materials, and perform all work necessary to construct sewer main stream crossings as required. No extra payment will be allowed for shoring, forming, dewatering, trenching, backfilling, riprap, concrete or steel, or any other items necessary in the completed work.

1.8. NOTICES TO PROPOERTY OWNERS AND AUTHORIES

A. Contractor shall, as provided in General Conditions, notify owners of adjacent property and utilities when prosecution of the Work may affect them.

B. When it is necessary to temporarily deny access to property, or when any utility service connection must be interrupted, Contractor shall give notices two (2) days in advance to enable the affected persons to provide for their needs. Notices will conform to any applicable local ordinances, will be delivered in writing, and will include appropriate information concerning the interruption and instructions on how to limit inconvenience caused thereby.

C. Utilities and other concerned agencies shall be notified at least two (2) days prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.

1.9. MAIL BOXES

A. The U.S. Post Office Department's regulations prohibit the delivery of mail to addresses where there are no mailboxes or where the mailboxes are not readily accessible because of construction excavation. Hence, in areas where it is necessary to remove mail boxes to facilitate the proposed Work, it shall be the obligation of the Contractor to install any mail boxes so removed to their original position and elevations within 24 hours and the area stabilized and restored to the original condition.

B. Also, any and all excavated material should be removed as soon as possible from the vicinity of all mail boxes so as to minimize mail delivery inconveniences.

1.10. LINES AND GRADES

A. All Work shall be done to the lines, grades, and elevations indicated on the Plans.

B. Basic horizontal and vertical control points have been established as shown on the plans. All additional survey, layout, and measurement work shall be performed by Contractor as a part of the Work.

C. Contractor shall provide an experienced instrument person, competent assistants, and such instruments, tools, stakes, and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish, without charge, competent persons and such tools, stakes, and other materials as Engineer may require on establishing or designating control points, in establishing construction easement boundaries, or in checking survey, layout, and measurement work performed by Contractor.

D. Contractor shall inform Engineer, a reasonable time in advance, of the times and places at which the Contractor wishes to do Work, so that the Contractor can establish horizontal and vertical control points and any checking deemed necessary by Engineer may be done with minimum delay to Contractor.

E. Contractor shall remove and reconstruct work that is improperly located.

1.11. CONNECTIONS TO EXISTING FACILITIES

A. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities, including structures, drainlines, and utilities such as water, sewer, gas, telephone, and electric. In each case, Contractor shall receive permission from Owner or the owning utility prior to undertaking connections. Contractor shall protect facilities against deleterious substances and damage.

B. Connections to existing facilities that are in service shall be thoroughly planned in advance, and all required equipment, materials, and labor shall be on hand at the time of undertaking the connections. Work shall proceed continuously (around the clock) if necessary to complete connections in the minimum time. Operation of valves or other appurtenances on existing utilities when required shall be by or under the direct supervision of the owning utility.

1.12. UNFAVARABLE CONSTRUCTION CONDITIONS

A. During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall confine his operations to Work that will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions that would adversely affect the quality or efficiency thereof, unless special means or precautions are taken by Contractor to perform the Work in a manner acceptable to the Owner.

1.13. CLEARING, GRUBBING, AND TREE REMOVAL.

A. The Contractor shall perform all clearing and grubbing as required to complete the work. Open burning of brush or debris will not be permitted. The Contractor shall dispose of all cleared and grubbed materials, and such clearing, grubbing, and tree removal shall be considered as an obligation of the Contractor and shall be performed at no extra cost to the Owner.

1.14. CUTTING AND PATCHING.

A. As provided in General Conditions, Contractor shall perform all cutting and patching required for the Work and as may be necessary in connection with uncovering Work for inspection or for the correction of defective Work.

B. Contractor shall perform all cutting and patching required for and in connection with the Work, including but not limited to the following:

1. Removal of improperly timed Work.
2. Removal of samples of installed materials for testing.
3. Alteration of existing facilities.
4. Installation of new Work in existing facilities.

C. Contractor shall provide all shoring, bracing, supports, and protective devices necessary to safeguard all Work and existing facilities during cutting and patching operations. Contractor shall not undertake any cutting or demolition that may affect the structural stability of the Work or existing facilities without Owner's approval.

D. Materials shall be cut and removed as required to complete the Work. Materials shall be removed in a careful manner, with no damage to adjacent facilities or materials. Contractor shall remove materials that are not salvable from the site.

E. All Work and existing facilities affected by cutting operations shall be restored with new materials, or with salvaged materials acceptable to Engineer, to obtain a finished installation with strength, appearance, and functional capacity required to match the existing area. If necessary, entire surfaces shall be patched and refinished.

F. The Contractor at no extra cost to the Owner shall replace any curbs removed or damaged and so designated to be replaced.

1.15. SITE MAINTENANCE.

A. Contractor shall keep the premises free at all times from accumulations of waste materials and rubbish. Contractor shall provide adequate trash receptacles and shall promptly empty the containers when filled.

B. Contractor shall neatly stack construction materials when not in use. Contractor shall promptly remove splattered concrete, asphalt, oil, paint, corrosive liquids, and cleaning solutions from the surfaces to prevent marring or other damage.

C. Volatile wastes shall be properly stored in covered metal containers and removed from the site daily.

D. Wastes shall not be buried on the site or disposed of into storm drains, sanitary sewers, streams, or waterways. All wastes shall be removed from the site and disposed of in a manner complying with local ordinances and antipollution laws.

E. Adequate cleanup will be a condition for recommendation of progress payment applications.

1.16. LICENSES, PERMITS, AND CERTIFICATES.

A. All licenses, permits, and certificates, etc. required for and in connection with the Work under the provisions of these Contract Documents shall be secured by the Contractor at his sole cost and expense. Contractor shall comply with all requirements and recommendations of the authority or authorities issuing the license, permit, or certificate.

B. Permits include but are not limited to the following:

1. Storm Water Pollution Prevention Plan (SWPPP).

1.17. PRECONSTRUCTION CONFERENCE

A. Prior to the commencement of Work at the site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:

1. Contractor and his superintendent.
2. Engineer.
3. Resident Project Representative.
4. Representatives of Owner.
5. Grant Administrator
6. Others as requested by Contractor, Owner, or Engineer, such as, but not limited to the following:

a. Principal Subcontractors.

b. Representative of principal Suppliers and manufacturers as appropriate.

c. Governmental representatives as appropriate.

B. Unless previously submitted to Engineer, Contractor shall bring to the conference preliminary schedules, such as, but no limited to the following:

1. Construction Schedule
2. Schedule of Values
3. Shop Drawings and other submittals.

C. The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include, but not limited to the following:

1. Contractor's preliminary schedules.
2. Transmittal, review, and distribution of Contractor's submittals.
3. Processing Applications for Payment.
4. Maintaining record documents.
5. Critical Work sequencing.
6. Field decisions and Change Orders.
7. Use of premises, office and storage areas, security, housekeeping, and Owner's needs.
8. Major equipment deliveries and priorities.
9. Contractor's assignments for safety and first aid.

D. Engineer will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

1.18. PROGRESS MEETINGS.

A. Contractor shall schedule and hold progress meetings at least monthly and at other times as requested by Engineer or required by progress of the Work. Contractor, Engineer, and all Subcontractors active on the site shall be represented at each meeting. Contractor may at his discretion request attendance by representatives of his Suppliers, manufacturers, and other Subcontractors.

B. Contractor shall preside at the meeting. Meeting minutes will be prepared and distributed by Contractor after review by Engineer. The purpose of the meetings will be to review the progress of the Work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems, which may develop on this project.

1.19. SITE ADMINISTRATION.

A. Contractor shall be responsible for all areas of the site used by him and all Subcontractors in the performance of the Work. Contractor will exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to Owner or others. Contractor has the right to exclude from the site all persons who have no purpose related to the Work or its inspection, and may require all persons on the site to observe the same regulations as he requires of his employees.

1.20. CLEAN-UP

A. The Contractor shall replace all surface material and shall restore paving, curbing, sidewalks, gutters, shrubbery, fences, sod, and other surfaces disturbed to a condition of equal or better to that before the work began, furnishing all material and labor incidental thereto.

B. All excavated material shall be removed and disposed of by the Contractor so that the grounds will be left equal or better than its original state.

C. Any deficiency in the quantity of material for filling depressions caused by settlement shall be supplied by the Contractor.

D. Surplus pipe materials, tools, and temporary structures shall be removed by the Contractor; all rubbish shall be hauled away by the Contractor and the construction site shall be left in its original condition or better.

E. In addition, the Contractor may be required to obtain an Owner approved release form, signed by the property owner's affected by the work of this project, as directed by Owner or Engineer.

1.21. FINAL ACCEPTANCE

A. After the completion of the Testing Items as specified in the Contract and prior to the final payment, the Contractor shall notify the Engineer that the work is ready for final inspection. A final inspection will be setup at a mutually agreed time between the Contractor and Engineer. The Engineer will provide the Contractor with the results of the final inspection and will not approve final payment until all work is done to the satisfaction of the Owner. Approval of the Engineer and final payment will not relieve the Contractor of his responsibility under other terms of this Contract.

1.22. EROSION AND SEDIMENT CONTROL

A. All work shall conform to the requirements of the Contractor's Storm Water Pollution Prevention Plan, which is made a part hereof by reference. If required by state or local requirements, Erosion Control Plans shall be submitted to the Engineer for review and approval prior to start of this project.

1.23. STREET LIGHTS

A. Areas where it is necessary to move streetlights due to construction interference shall be at Contractor's sole cost and responsibility.

1.24. GUIDELINES FOR OPEN EXCAVATIONS

A. Required excavations shall be restored to the level of the adjacent surfaces as soon as practicable. Unsupervised open excavations on public properties are discouraged at all time. Every person who for any purpose makes or causes to be made any excavation in, upon, under, through or adjoining any street, sidewalk, alley, park, boulevard, parkway or any other public properties, and shall leave any part or portion thereof open shall provide effective protection to the public.

B. All excavations in roadways shall be protected and secured in compliance with existing federal, state and local codes and standards, including, but not limited to the most current edition of the Manual of Uniform Traffic Control Devices.

C. All unsupervised excavations not within roadways shall be protected and secured. A protective cover over an excavation shall be installed so that it can sustain the weight of any persons and/or objects placed upon it. The cover shall be fixed to the ground so it cannot be moved. Protective covers shall have no opening(s) or protuberance(s) of sufficient size to cause a fall and/or injury. Advance warning devices shall be installed as necessary.

D. Any excavation that is not covered shall be fenced in such a way that it surrounds the entire area under excavations so as to prevent entry by any persons. The fencing shall be a minimum of 42" in height. The fence shall be constructed in such a manner that it is adequately secured and will remain upright at all times under normal site conditions.

E. All protective coverings and/or fences on excavations shall be inspected at least daily to assure integrity. Protective coverings and/or fences in heavily trafficked areas shall be inspected more often as necessary.

F. All necessary and applicable permits shall be secured for any work contemplated on public properties before commencing any activity. In all instances the applicant agrees to perform all work in accordance with the permit and to indemnify and hold harmless the Owner from all liability, judgments, costs, expenses and claims growing out of damages or alleged damages, of any nature to any person or property arising out of performance or non-performance of said work or the existence of facilities and/or appurtenances thereof.

1.25. SHORING PLAN REQUIREMENTS

A. Contractor shall submit a shoring design sealed by a Registered Professional Engineer in the State of Missouri for all excavations greater than twenty (20) feet in depth prior to excavation in accordance with 29 CFR Past 1926 - OHSA Subpart P - Excavations and Trenches.

1.26. SCHEDULE OF VALUES.

A. Where a contract is awarded on a Lump Sum basis, the Contractor shall file with the Engineer a balanced price segregation of the Lump Sum bid into items similar to the various subdivisions of the general and detailed specifications, the sum of which shall equal the Lump Sum bid:

1. The cost of various materials shall be furnished upon request of the Engineer, and such data will then be used as a basis for making progress estimates.

2. Breakdown costs, itemized by Specification Section and trade, and distribute cost to individual applicable units and structures.

3. Where structures, units, equipment of other components are identified by a specific series or, identification number, utilize said designation throughout cost breakdown.
4. Provide detailed breakdown for individual yard piping or conduit runs and identify approximate quantities involved to satisfaction of the Engineer.
5. Provide separate breakdown for change order items requested.
6. Provide an additional breakdown sheet showing the tabulation format for stored materials.
7. Submit this sheet each month with Contractor's pay request breakdown.
8. The detail and format of cost breakdown and stored materials tabulation sheet shall be fully approved by Engineer.

B. A reasonable allocation of the Contract Proce to the component parts of the Work will be approved if component parts of the Work have values assigned to them that are well-balanced with respect to relative values for similar work established by published estimating guides:
   1. Unless otherwise agreed to at the Preconstruction Conference, Means Estimator Guide or other similar nationally recognized estimating guide shall be used for resolving differences between Engineer's and Contractor's opinions of allocation of values.
   2. Consent of Surety: If Contractor and Engineer cannot mutually agree on a Schedule of Values, Engineer will approve a Sche3dule of Values approved by the Surety providing the Performance Bond.

C. Contractor's costs shall not govern the allocation of values when application of Contractor's costs to a component part of the Work results in any other component part of combination of component parts being under-valued in relation to conventional estimating guides.

D. Schedule of Values shall be agreed upon prior to first Application for Payment.

1.27. HISTORICAL AND ARCHAEOLOGICAL.

A. If during the course of construction, evidence of deposits of historical or archeological interest is found, the Contractor shall cease operations affecting the find and shall notify Owner. No further disturbance of the deposits shall ensue until the Contractor has been notified by Owner that Contractor may proceed. Owner will issue a notice to proceed after appropriate authorities have surveyed the find and made a determination to Owner. Compensation to the Contractor, is any, for lost time r changes in construction resulting from the find, shall be determined in accordance with changed or extra work provisions of the Contract Documents.

PART 2: PRODUCTS

2.1. NOT USED

PART 3: EXECUTION

3.1. NOT USED

END OF SECTION 01100.

SECTION 01202 – SUBMITTALS

PART 1: GENERAL

1.1. SECTION INCLUDES:

A. Mechanics and administration of the submittal process for Shop Drawings, samples, and informational submittals.

B. General content requirements for Shop Drawings.

1.2. RELATED REQUIREMENTS:

A. Bidding Requirements, Contract Forms, and Conditions of the Contract.

B. General Requirements

C. Operation and Maintenance Manual submittal requirements.

1.3. DEFINITIONS

A. Informational Submittals are submittals other than Shop Drawings and samples required by the Contract Documents that do not require approval.

B. Representative types of informational submittal items include but are not limited to:

1. Construction progress schedules.
2. Installed equipment and system performance test reports.
3. Manufacturer's installation certification letters.
4. Instrumentation and control commissioning reports.
5. Warranties.
6. Service agreements.
7. Construction photographs.
8. Survey data.
9. Health and safety plans.
10. Work plans.

C. For Information Only submittals upon which the Engineer is not expected to conduct review or take responsive action may be so identified.

1.4. LABOR STANDARDS PROVISION

A. The Contractor shall furnish the Owner, within seven (7) days after the regular payment date of the weekly payroll period, a statement with respect to wages paid to each of the Contractor's employees, and wages paid to each of the subcontractor's employees. The Contractor shall be responsible for the submission of the copies of payrolls of his employees and all of his subcontractors' employees.

B. The payroll shall be submitted on U.S. Department of Labor Wage and Hour Division Form WH-347 only. The payrolls will not be accepted on any other form.

C. The copy shall be accompanied by a statement signed by the Contractor indicating that the payrolls are correct and complete, that wage rates contained therein are not less than those determined by the Wage Determination. The definition of "employee" shall not apply to persons in classification higher than that of laborers or mechanics and those who are the immediate supervisor of such employees.

1.5. SUBSTITUTES AND "OR-EQUAL" ITEMS

A. Whenever a material or article is specified or described by using the name of a proprietary product or the name of a particular manufacturer of vendor, the specified item mentioned shall be understood as establishing the type, function, and quality desired.

1. Requests for review of equivalency will not be accepted from anyone except Contractor, and such requests will not be considered until after the Contract had been awarded.

2. Other manufacturers' products will be accepted provided sufficient information is submitted to allow Engineer to determine that the products proposed are equivalent to those named.

B. Whenever the names of proprietary products or the names of particular manufacturers or vendors are used, it shall be understood that the words "or equal" following the enumeration, if not specifically stated, are implied.

C. All field books, notes, videotapes, and other data developed by Contractor in performing surveys required as part of the Work shall be available to Engineer for examination throughout the construction period. All such data shall be submitted to Engineer with the other documentation required for final acceptance of the Work.

1.6. SHOP DRAWINGS AND ENGINEERING DATA

A. Shop Drawings and engineering data covering all equipment and fabricated and building materials which will become a permanent part of the Work under this Contract shall be submitted to Engineer for review, at the Engineer's address given in the Agreement. The data shall include drawings and descriptive information sufficient detail to show the kind, size, arrangement, and operation of component materials and devices; the external connections, anchorages, and supports required; performance characteristics; and dimensions needed for installation and correlation with other materials and equipment.

B. All submittals, regardless of origin, shall be stamped with the approval of Contractor and identified with the name and number of this Contract, Contractor's name, and references to applicable specification paragraphs and Contract Drawings.

1. Each submittal shall indicate the intended use of the item in the Work.

2. When catalog pages are submitted, applicable items shall be clearly identified and inapplicable data crossed out.

3. The current revision, issue number, and date shall be indicated on all drawings and other descriptive data.

C. Contractor's stamp of approval is a representation to Owner and Engineer that Contractor accepts full responsibility for determining and verifying all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, and that he has reviewed and coordinated each submittal with the requirements of the Work and the Contract Documents.

D. Contractor shall accept full responsibility for the completeness of each submission. When an item consists of components from several sources, Contractor shall submit a complete initial submittal including all components.

E. All deviations from the Contract Documents shall be identified on each submittal and shall be tabulated in Contractor's letter of transmittal. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by Contractor (including modifications to other facilities that may be a result of the deviation) and all required piping and wiring diagrams.

F. Schedule of Shop Drawings shall be submitted and approved within 20 days of Notice to Proceed.

G. Informational Submittals, reports and installation certifications shall be submitted within 5 working days of conducting testing or examination.

H. An electronic copy of each drawing and necessary data shall be submitted to the Engineer.

1. Engineer will return an electronic copy to Contractor.
2. Facsimile (fax) copies will not be acceptable.
3. Engineer will not accept submittals from anyone but Contractor.
4. Submittals shall be consecutively numbered in direct sequence of submittal and without division by subcontracts or trades.

I. Certificate of Compliance

1. Where indicated in these specifications, each submittal shall include a certificate of compliance prepared by the manufacturer or Supplier of the submitted data, certifying that the item covered is in compliance with Contract Documents.
2. The certificate of compliance shall be a separate document and shall include identification of all deviations from the Contract Documents.

J. Engineer's Review of Drawings and Data

1. Engineer's review of drawings and data submitted by Contractor will cover only general conformity to the Drawings and Specifications, external connections, and dimensions which affect the layout.
2. Engineer's review does not indicate a thorough review of all dimensions, quantities, and details of the material, equipment, device, or item shown.
3. Engineer's review shall not relieve Contractor of Contractor's responsibility for errors, omissions, or deviations in the drawings and data, nor of sole responsibility for compliance with the Contract Documents.

4. Engineer's submittal review period shall be 21 consecutive calendar days in length and shall commence on the first calendar day immediately following the date of arrival of the submittal or re-submittal in Engineer's office. The time required to mail the submittal or re-submittal back to Contractor shall not be considered a part of the submittal review period.
5. When the drawings and data are returned marked "NOT ACCEPTABLE" or "RETURNED FOR CORRECTION", the corrections shall be made as noted thereon and as instructed by Engineer and a corrected copy re-submitted.
6. When the drawings and data are returned marked "EXCEPTIONS NOTED", "NO EXCEPTIONS NOTED", or "RECORD COPY", no additional copies need be furnished unless requested by Engineer at time of review.

K. Re-submittal of Drawings and Data

1. Contractor shall accept full responsibility for the completeness of each re-submittal.
2. Contractor shall verify that all corrected data and additional information previously requested by Engineer are provided on the re-submittal.
3. When corrected copies are resubmitted, Contractor shall in writing direct specific attention to all revisions and shall list separately any revisions made other than those called for by Engineer on previous submissions.
4. Requirements specified for initial submittals shall also apply to re-submittals. Re-submittals shall bear the number of the first submittal followed by a letter (A, B, etc.) to indicate the sequence of the re-submittal.
5. Re-submittals shall be made within 30 days of the date of the letter returning the material to be modified or corrected, unless within 14 days Contractor submits an acceptable request for an extension of the stipulated time period, listing the reasons the re-submittal cannot be completed within that time.
6. Any need for more than one resubmission, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Times unless delay of the Work is directly caused by a change in the Work authorized by a Change Order or by failure of Engineer to review any submittal within the submittal review period specified herein and to return the submittal to Contractor.

L. Distribution of Submittals

1. If the submittals are not approved the distribution will be as follows:
   a. 1 copy to Contractor
   b. 1 copy to Owner
   c. 1 copy to Engineer
2. If the submittals are approved the distribution will be as follows:
   a. 1 copy to Contractor
   b. 1 copy to Owner
   c. 1 copy to Engineer
   d. 1 copy to Resident Project Representative

PART 2: PRODUCTS

A. Not Used

PART 3: EXECUTION

A. Not Used

END OF SECTION 01202

SECTION 01400 - QUALITY CONTROL

PART 1: GENERAL

1.1. SECTION SUMMARY:

A. Required inspection and testing services are intended to assist in the determination of probable compliance of the work with requirements specified or indicated.

B. These required services do not relieve the Contractor of responsibility for compliance with these requirements or for compliance with requirements of the contract documents.

1.2. RELATED SECTIONS:

A. Bidding Requirements, Contract Forms, and Conditions of the Contract.

B. General Requirements.

C. Section 01202 – Submittals.

1.3. DEFINITIONS:

A. The requirements of this Specification Section relate primarily to customized fabrication and installation procedures, not to the production of standard products.

B. Quality control services include inspections and tests and related actions including reports, performed by independent agencies and governing authorities, as well as directly by the Contractor.

C. These services do not include Contract enforcement activities performed directly by the Engineer:

1. Specific quality control requirements for individual units of work are specified in the sections of these specifications that specify the individual element of the work. These requirements, including inspections and tests, cover both production of standard products and fabrication of customized work. These requirements also cover quality control of the installation procedures.

2. Inspections, tests and related actions specified in this Specifications Sections and elsewhere in the Contract Documents are not intended to limit the Contractor's own quality control procedures which facilitate overall compliance with requirements of the Contract Documents.

3. Requirements for the Contractor to provide quality control services as required by the Engineer, the Owner, governing authorities or other authorized entities are not limited by the provisions of this Specification Section.

1.4. RESPONSIBILITIES

A. Contractor Responsibilities:

1. Except where they are specifically indicated as being the Owner's responsibility, or where they are to be provided by another identified entity, inspections, tests and similar quality control services are the Contractor's responsibility; these services also include those specified to be performed by a independent agency and not directly by the Contractor. Costs for these services shall be included in the Contract Price.

2. The Contractor shall employ and pay an independent agency, testing laboratory, or other qualified firm to perform quality control services specified.

B. Retest Responsibility:

1. Where results of required inspections, tests of similar services prove unsatisfactory and do not indicate compliance of related work with the requirements of the Contract Documents, then retests are the responsibility of the Contractor, regardless of whether the original test was the Contractor's responsibility.
2. Retesting of work revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on the original work.

C. Responsibility for Associated Services:

1. The Contractor is required to cooperate with the independent agencies performing required inspections, tests, and similar services.
2. Provide such auxiliary services as are reasonably requested.
3. Notify the testing agency sufficiently in advance of operations to permit assignment of personnel.
4. These auxiliary services include but are not necessarily limited to the following:
   a. Providing access to the work.
   b. Taking samples or assistance with taking samples.
   c. Delivery of samples to test laboratories.
   d. Security and protection of samples and test equipment at the project site.

D. Coordination:

1. The Contractor and each independent agency engaged to perform inspections, tests and similar services for the project shall coordinate the sequence of their activities so as to accommodate required services with a minimum of delay in the progress of the work.
2. In addition, the Contractor and each independent testing agency shall coordinate their work so as to avoid the necessity of removing and replacing work to accommodate inspections and tests.
3. The Contractor is responsible for scheduling times for inspections, test, taking of samples, and similar activities.

1.5. QUALITY ASSURANCE

A. Except as otherwise indicated, engage inspection and test service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories and which are recognized in the industry as specialized in the types of inspections and tests to be performed.

1.6. SUMMITALS

A. Submit a certified written report of each inspection, test, or similar service, directly to the Engineer.

B. If Contractor is responsible for the service, submit a certified written report of each inspection, test, or similar service through the Contractor, in duplicate:

1. Written reports of each inspection, test or similar service shall include, but not limited to the following:

a. Name of testing agency or test laboratory.

b. Dates and locations of samples and tests or inspections.

c. Names of individuals making the inspection or test.

d. Designation of the work and test method.

e. Complete inspection or test data.

f. Test results.

g. Interpretations of the test results.

h. Notation of significant ambient conditions at the time of sample taking and testing.

i. Comments or professional opinion as to whether inspected or tested work complies with requirements of the Contract Documents.

j. Recommendations on retesting, if applicable.

1.7. PERFORMANCE TESTS

A. Refer to technical Specification Sections for acceptance testing requirements.

B. No tests will be conducted on equipment or materials for which manufacturer's field service is specified unless manufacturer's Field Representative is present and declares in wring that the equipment and materials are ready for such test.

C. Contractor will be notified so that he can have a representative, or manufacturer's representative, present during any tests of equipment or materials for which manufacturer's field service is not specified.

D. The tests will be made as set forth in the Specifications unless the interested parties mutually agree upon some other manner of testing.

PART 2: PRODUCTS

2.1. NOT USED.

PART 3: EXECUTION

3.1. EXECUATION

A. Upon completion of inspection, testing, sample taking and similar services performed on the work, repair damaged work.

B. Protect work exposed by or for quality control service activities, and protect repaired work.

C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

END OF SECTION 01400

SECTION 01501 - TEMPORARY BYPASS PUMPING SYSTEMS

PART 1: GENERAL

1.1. DESCRIPTION

A. Section includes requirements for implementing a temporary pumping system for the purpose of diverting existing sewage flow around work area for duration of the project. This work is not required and is considered an option of the Contractor.

1.2. QUALITY ASSURANCE

A. Follow national standards and as specified herein.

B. Maintain and inspect temporary pumping system every two hours. Responsible operator: on site when pumps are operating.

C. Keep and maintain spare parts for pumps and piping on site, as required.

D. Maintain adequate hoisting equipment and accessories on site for each pump.

1.3. SUBMITTALS

A. Submit following requirements of Section 01201.

1. Detailed plan and description of proposed pumping system. Indicate number, size, material, location and method of installation of suction and discharge piping, size of pipeline or conveyance system to be bypassed, staging area for pumps, site access point, and expected flow.
2. Size and location of manhole or access points for suction and discharge hose or piping.
3. Sections showing suction and discharge pipe depth, embedment, select fill and special backfill, if buried.
4. Temporary pipe supports and anchoring required.
5. Thrust and restraint block sizes and locations.
6. Sewer plugging method and type of plugs.
7. Bypass pump sizes, capacity, number of each size to be on site and power requirements.
8. Backup pump, power and piping equipment.
9. Calculations of static lift, friction losses, and flow velocity. Pump curves showing pump operating range.
10. Design plans and computation for access to bypass pumping locations indicated on drawings.
11. Calculations for selection of bypass pumping pipe size.
12. Method of noise control for each pump and/or generator.
13. Method of protecting discharge manholes or structures from erosion and damage.

14. Schedule for installation and maintenance of bypass pumping lines.
15. Procedures to monitor upstream mains for backup impacts.
16. Procedures for setup and breakdown of pumping operations.
17. Emergency plan detailing procedures to be followed in event of pump failures, sewer overflows, service backups, and sewage spillage.
18. Maintain copy of emergency plan on site for duration of project.
19. Certify bypass system will meet requirements of codes, and regulatory agencies having jurisdiction by licensed engineer in the State of Missouri.

1.4. CONTRACTORS RESPONSIBILITY FOR OVERFLOWS AND SPILLS

A. Schedule and perform work in manner that does not cause or contribute to incidence of overflows, releases or spills of sewage from sanitary sewer system or bypass operation.

1.5. DELIVERY AND STORAGE

A. Transport, deliver, handle, and store pipe, fittings, pumps, ancillary equipment and materials to prevent damage and following manufacturer's recommendations. Inspect all material and equipment for proper operation before initiating work.

B. Material found to be defective or damaged due to manufacturer or shipment.

1. When Engineer deems repairable: Repair as recommended by manufacturer.
2. When Engineer deems not repairable: Replace as directed by Engineer before initiating work.
3. Repair or replacement of defective or damaged material and equipment will be at no cost to Commission.

PART 2: PRODUCTS

2.1. MATERIALS

A. Discharge and Suction Pipes: Approved by Engineer.

1. Discharge piping: Determined according to flow calculations and system operating calculations.
2. Suction piping: Determined according to pump size, flow calculations, and manhole depth following manufacturer's specifications and recommendations.

B. Polyethylene Plastic Pipe:

1. High density solid wall and following ASTM F714 Polyethylene (PE) Plastic Pipe (SDR-DR) based on Outside Diameter, ASTM D1248 and ASTM D3550
2. Homogenous throughout, free of visible cracks, discoloration, pitting, varying wall thickness, holes, foreign material, blisters, or other deleterious faults.

C. High-Density Polyethylene (HDPE).

1. Homogenous throughout, free of visible cracks, discoloration, pitting, varying wall thickness, holes, foreign material, blisters, or other deleterious faults. (For defective areas of pipe, cut out and joint fused as stated herein.)
2. Assembled and joined at site using couplings, flanges or butt-fusion method to provide leak proof joint. Follow manufacturer's instructions and ASTM D 2657. (Threaded or solvent joints and connections are not permitted.)
3. Fusing: By personnel certified as fusion technicians by manufacturer of HDPE pipe and/or fusing equipment.
4. Butt-fused joint: True alignment and uniform roll-back beads resulting from use of proper temperature and pressure.
    a. Allow adequate cooling time before removal of pressure.
    b. Watertight and have tensile strength equal to that of pipe.
    c. Acceptance by Engineer before insertion.
5. Use in streams, storm water culverts and environmentally sensitive areas.

D. Flexible Hoses and Associated Couplings and Connectors.
1. Abrasion resistant.
2. Suitable for intended service.
3. Rated for external and internal loads anticipated, including test pressure. Incorporate anticipated traffic loadings, including traffic impact loading for external loading design.
4. When subject to traffic loading, compose system, such as traffic ramps or covers. Install system and maintain H-20 loading requirements while in use or as directed by the Engineer.

E. Valves and Fittings: Determined according to flow calculations, pump sizes previously determined, and system operating pressures.

F. Plugs: Select and install according to size of line to be plugged, pipe and manhole configurations, and based on specific site.
1. Have additional plugs available in the event a plug fails.
2. Plugs will be inspected before use for defects which may lead to failure.

G. Aluminum "irrigation type" piping or glued PVC piping will not be permitted.

H. Discharge hose will only be allowed in short sections when approved by Engineer.

2.2. EQUIPMENT

A. Pumps.
1. Fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in priming system.
2. Electric or diesel powered.
3. Constructed to allow dry running for long periods of time to accommodate cyclical nature of effluent flows.

B. Provide.

1. Necessary stop/start controls for each pump.
2. One standby pump of each size maintained on site. On-line, isolated from primary system by a valve.
3. Quiet flow pumps at request of Engineer.

2.3. DESIGN REQUIREMENTS

A. Bypass pumping systems:

1. Sufficient capacity to pump peak flow. Peak flows greater than 40 gpm as approved by Engineer.
2. Operate 24 hours per day.

B. Provide pipeline plugs and pumps of adequate size to handle peak flow, and temporary discharge piping to ensure total flow of main can be safely diverted around section to be repaired.

PART 3: EXECUTION

3.1. PREPARATION

A. Determining location of bypass pipelines.

1. Minimal disturbance to existing utilities. Field locate existing utilities in proposed bypass area.
2. Obtain approvals for placement within public or private property.
3. Obtain Engineer's approval of location.
4. Costs associated with relocation of utilities and obtaining approvals at no cost to the Owner.

3.2. INSTALLATION AND REMOVAL

A. Provisions and requirements must be reviewed by Engineer before starting construction.

B. Remove manhole sections or make connections to existing sewer and construct temporary bypass pumping structures at access location indicated on Drawings and as required to provide adequate suction conduit.

C. Plugging or blocking of sewage flows shall incorporate a primary and secondary plugging device. When plugging or blocking is no longer needed for performance and acceptance of work, remove in a manner that permits the sewage flow to slowly return to normal without surge, to prevent surcharging or causing other major disturbances downstream.

D. When working inside manhole or force main, exercise caution. Follow OSHA, Local, State and Federal requirements. Take required measures to protect workforce against sewer gases and/or combustible or oxygen-deficient atmosphere.

E. Installation of Bypass Pipelines:

1. Pipeline may be placed along shoulder of roads. Do not place in streets or sidewalks.
2. When bypass pipeline crosses local streets and private driveways, place in roadway ramps. When roadway ramps cannot be used, place bypass in trenches and cover with temporary pavement as approved by Engineer.

F. During bypass pumping operation, protect sewer lines from damage inflicted by equipment.

G. Upon completion of bypass pumping operations, and after the receipt of written permission from Engineer, remove piping, restore property to pre-construction condition and restore pavement.

END OF SECTION 01501

SECTION 01504 - CLEANUP OPERATIONS

PART 1: GENERAL.

1.1. GENERAL

A. After a minimum period of twenty-four (24) hours after the pipe placement, the Contractor shall be responsible for cleanup operations as follows:

1. Within a maximum period of three (3) working days after tear-out of sidewalk and curb, the new concrete shall be placed.
2. Removal of forms, backfilling of the form excavation and debris removal from streets, sidewalks and parkway areas shall be accomplished within three (3) working days after the concrete placement. The backfilled areas within one foot of new concrete shall not be compacted until the concrete has cured a minimum of three (3) days.
3. Within a maximum period of five (5) working days after the concrete is placed, the Contractor shall be required to complete all joint caulking, pavement restoration and seeding.
4. If construction is being performed during periods other than designated seeding seasons, all unseeded locations shall be completed within ten (10) working days after the beginning of the next seeding season. Refer to Section 02900 – Seeding, Sodding and Overseeding of these specifications for requirements of seed work.

B. If cleanup, backfilling, seeding, joint caulking or pavement restoration is not accomplished within the above limits, all tear-out operations shall cease until these items are finished or as directed by the Engineer.

C. All excavated material shall be removed and disposed of by the Contractor so that the grounds will be left equal or better than its original state. Any deficiency in the quantity of material for filling depressions caused by settlement shall be supplied by the Contractor.

D. Surplus pipe materials, tools, and temporary structures shall be removed by the Contractor; all rubbish shall be hauled away by the Contractor and the construction site shall be left in its original condition or better. Measurement for payment of completed items will be subject to the completion of these cleanup operations.

E. Tear-out shall not begin if unfavorable conditions for concrete placement are forecast for the next several days. All cleanup operations, as stated above, shall be completed within three (3) calendar days of concrete placement.

PART 2: PRODUCTS

2.1. NOT USED

PART 3: EXECUTION

3.1. NOT USED

END OF SECTION 01504

SECTION 01601 – MATERIAL & EQUIPMENT

PART 1: GENERAL

1.1. SECTION INCLUDES

A. Products.

B. Transportation and Handling

C. Storage and Protection

D. Product Options

E. Substitutions

1.2. RELATED SECTIONS

A. Instruction to Bidders

B. Section 01400 – Quality Control

1.3. PRODUCTS

A. Products: Means new material, components, equipment, fixtures, and systems forming the work. Does not include machinery and equipment used for preparation, fabrication, conveying, and erection of the work. Products may also include existing materials or components required for reuse.

B. Provide interchangeable components of the same manufacture, for similar components where possible.

1.4. TRANSPORTATION AND HANDLING

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

1.5. STORAGE AND PROTECTION

A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.

B. For exterior storage of fabricated products, place on sloped supports, above ground.

C. Provide off-site storage and protection when site does not permit on-site storage or protection.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid surfaces in a well-drained area. Prevent mixing with foreign matter.

F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged, and are maintained under specified conditions.

1.6. PRODUCT OPTIONS

A. Products specified by Reference Standards or by description only: Any product meeting those standards or description.

B. Products specified by naming one or more manufacturers: Products or manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not named.

1.7. SUBSTITUTIONS

A. Engineer will consider requests for substitutions only within 20 days after the date of Notice to Proceed.

B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. See "Substitution Request" form at the end of this section.

D. A request constitutes a representation that Contractor:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product,
2. Will provide the same warranty for the Substitution as for the specified product,
3. Will coordinate installation and make changes to other work which may be required for the work to be complete with no additional cost to Owner,
4. Waives claim for additional costs or time extension which may subsequently become apparent,
5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
6. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

PART 2: PRODUCTS

2.1. NOT USED

PART 3: EXECUTION

3.1. NOT USED

SUBSTITUTION REQUEST

Project Number: 24-0518

Project Title: Sanitary Sewer Collection System Improvements

To: _____ Authorization Number: _____
_____ From: _____
Re: _____ Date: _____
_____ Contract For: _____

Specification Title: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer: _____ Address: _____ Phone No. _____
Trade Name: _____ Model No. _____
Installer: _____ Address: _____ Phone No. _____
History: ❑ New Product ❑ 2-5 years old ❑ 5-10 years old ❑ More than 10 years old
Differences between proposed substitution and specified product: _____
_____
_____

❑ Point-by-point comparative data attached – REQUIRED

Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance, service, and availability of replacement parts, as applicable, are available.
- Proposed substitution will not affect or delay Progress Schedule, except as stated below.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances, except as stated below.
- Payment will be made for changes to building design, including architectural or engineering design, detailing, licenses, royalties, and construction costs caused by the requested substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be completed in all respects.

Reason for not providing specified item: ___
_____
_____
_____

Similar Installation:
Project: _____ Design Professional: _____
Address: _____ Owner: _____
_____ Date Installed: _____
Proposed substitution affects other parts of Work: ❑ No ❑ Yes; explain _____
_____
_____

Savings to Owner for accepting substitution: _____
Proposed substitution changes Contract Time: ❑ No ❑ Yes; add/deduct _____ days.

Supporting Data Attached:
❑ Product Data ❑ Drawings ❑ Tests ❑ Reports ❑ Samples ❑ _____
Attachments: _____

Submitted by: _____
Signature: _____
Firm: _____
Address: _____

Telephone: _____ Fax: _____ E-Mail: _____

Additional Comments: ❑ Contractor ❑ Subcontractor ❑ Supplier ❑ Manufacturer ❑ DP ❑ _____

DESIGN PROFESSIONAL'S REVIEW AND ACTION

- ❑ Substitution approved – Make submittals in accordance with Specification Section 01300.
- ❑ Substitution approved as noted – Make submittals in accordance with Specification Section 01300.
- ❑ Substitution rejected – Use specified materials.
- ❑ Substitution Request received too late – Use specified materials.

Signed by: _____ Date: _____

Distribution:
- ❑ Owner
- ❑ Design Professional
- ❑ Contractor
- ❑ Consultant
- ❑ Construction Manager
- ❑ Other

END OF SECTION 01601

SECTION 02205 – ASPHALTIC CONCRETE SURFACE AND BASE

PART 1: GENERAL

1.1. SCOPE OF WORK

A. Furnish the necessary equipment, labor and materials required and perform all work in connection with construction of asphaltic concrete base and/or asphalt concrete surface as shown on the Drawings and as specified herein.

1.2. REFERENCE STANDARDS

A. American Society for Testing and Materials (ASTM)

1. ASTM C88 – Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
2. ASTM C 117 - Test Method for Materials Finer than 75- um (No. 200) Sieve in Mineral Aggregates by Washing
3. ASTM C 127 - Test Method for Specific Gravity and Absorption of Coarse Aggregate
4. ASTM C 128 - Test Method for Specific Gravity and Absorption of Fine Aggregate
5. ASTM C131 – Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
6. ASTM C136 – Test Method for Sieve Analysis of Fine and Coarse Aggregates
7. ASTM C142 – Test Method for Clay Lumps and Friable Particles in Aggregates
8. ASTM D75 – Practice for Sampling Aggregates
9. ASTM D 140 - Practice for Sampling Bituminous Materials
10. ASTM D 290 - Practice for Bituminous Mixing Plant Inspection
11. ASTM D 979 - Practice for Sampling Bituminous Paving Mixtures
12. ASTM D 1188 - Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens
13. ASTM D 2041 - Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
14. ASTM D 2172 - Test Methods for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
15. ASTM D 2726 - Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
16. ASTM D 2950 - Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
17. ASTM D 3666 - Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials
18. ASTM D 4552 - Practice for Classifying Hot-Mix Recycling Agents

19. ASTM D 5444 - Test Method for Mechanical Size Analysis of Extracted Aggregate
20. ASTM D 6307 - Test Method for Asphalt Content of Hot-Mix Asphalt by Ignition Method
21. ASTM D 6373 - Specification for Performance Graded Asphalt Binder

B. American Association of State Highway and Transportation Officials (AASHTO)

1. AASHT0 PP 26 - Practice for Certifying Suppliers of Performance Graded Asphalt Binders
2. AASHTO T 245 - Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus
3. AASHT0 T 283 - Resistance of Compacted Bituminous Mixture to Moisture Induced Damage

C. Asphalt Institute

1. "Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types", MS-2, Sixth Edition

D. National Bureau of Standards

E. Handbook #44, "Specifications, Tolerance and other Technical Requirements for Commercial Weighing and Measuring Devices"

1.3 QUALITY ASSURANCE

A. Asphalt Mixing Plant: Plants used by the Contractor for preparation of the asphalt paving mix shall conform to the following requirements:

B. Field Testing Laboratory: The Contractor shall be responsible for having an independent testing laboratory perform test to verify compliance.

C. The Contractor shall be responsible for having the independent testing laboratory perform aggregate sieve analysis, asphaltic concrete paving mixture analysis, and paving mixture density tests.

D. The asphalt producer shall establish a quality control plan and shall maintain records. The quality control plan will be reviewed and approved by the City.

1.4 DELIVERY, STORAGE AND HANDLING

A. Transportation of Mix:

1. The mix shall be transported to the job site in vehicles with tight metal bottoms, clean of all foreign material which may affect the mix. If a release agent is used, it must comply with State and Federal environmental regulations. The dispatching of the vehicles shall be so scheduled that all materials delivered may be placed in daylight unless the Engineer approves artificial light. Delivery of the material to the paver shall be at a uniform rate and in an amount within the capacity of the paving and compacting equipment.

2. Haul trucks shall be provided with covers of sufficient size and weight to completely cover the truck bed to protect the load and to prevent cooling of the upper surface. Failure to have the load completely covered shall be sufficient cause for rejection of the entire load. The load shall remain covered until the truck is next in line to be unloaded. In no case shall a load remain uncovered for more than 10 minutes before starting to use the load. If for any reason there is a delay in completely using a load, the remaining part of the load shall be recovered until it can be used. It shall be the responsibility of the Contractor to inform all truck drivers of these provisions before starting work.

B. Scales and Weighing of Vehicles:

C. The vehicle's tare and gross weight shall be established by actually weighing the vehicle on a certified scale. The tare weight will be established at least twice each day. The vehicle, when establishing tare, shall be clean, bed empty, fuel tanks filled and shall have all side and back boards in place.

D. Measurement by weight: Measurement will be made by weighing each truck load on scales conforming to the requirements of b. “Vehicle Scales,” as shown below.

E. Vehicle Scales: Vehicle scales shall be approved by the engineer and shall conform to the requirements specified herein. The specifications, tolerances, and other technical requirements for weighing and measuring devices as recommended by the National Conference on Weights and Measures and published in the National Institute of Standards and Technology Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, and supplements thereto or revisions thereof, shall apply to all vehicles scales used.

F. Scale acceptance shall be based on one of the following:

1. A valid certification or seal of approval by the Division of Weights and Measures from the state.

2. A certification of calibration from a commercial scale service company showing that the scale meets the requirements of these specifications. The contractor shall furnish the certification of calibration to the Engineer.

G. Scale Calibration:

1. Scales shall have been calibrated within the nine-month period prior to any material being delivered, or at any time the Engineer has cause to question the accuracy of the scale. Scales shall meet the requirements of Accuracy Class III L as defined in Handbook 44 (above).

2. Verification of a vehicle scale may be required by weighing a hauling unit on another recently calibrated and certified scale.

3. If equipment to be weighed is of such length that all axles cannot be weighed simultaneously, a level paved surface shall be provided permitting those axles not on the scale platform to be supported by the paved surface. The approach shall be at least as wide as the platform and of sufficient length to insure the level positioning of vehicles during weight determinations. The weighing shall be performed with all brakes released. If equipment to be weighed is equipped with an air bag suspension unit on any axle, the equipment including semi-trailers or pup trailers shall be weighed on vehicle scales of sufficient size to weigh all axles of the combination simultaneously.

H. All cost incurred in obtaining a certification of calibration or verification shall be borne by the contractor.

PART 2: PRODUCTS

2.1 MATERIALS

A. No material shall be used until approved by the engineer. All costs associated with material testing, certification and the preparation of trial mixes to determine the job mix formula shall be the responsibility of the contractor. Representative 2 samples of all materials proposed for use under these specifications shall be submitted to a City approved private testing laboratory by the contractor, at the contractor's expense, for testing and the preparation of trial mixes to determine the job-mix formula. Additional tests necessary for determining conformance with the requirements specified herein shall be the responsibility of the Contractor.

B. Asphalt: Asphalt cement used in the manufacture of asphalt paving mixtures shall conform to the Performance Graded system. The PG graded material used shall conform to the provincial grade used by the local DOT or as designated by the Engineer.

C. The asphalt cement shall conform to ASTM D 6373. Sampling shall be in accordance with ASTM D 140.

D. The contractor or asphalt supplier shall submit a quality assurance plan for the asphaltic cement to the engineer that conforms to AASHTO PP 26. He shall also submit a temperature-viscosity chart showing the recommended mix and compaction temperatures for non-modified asphalts and shall provide the specific gravity of the asphalt.

E. Aggregate: The quality of aggregates used in Asphaltic Concrete shall conform to the following:

Coarse Aggregate (Retained on the No. 4 Sieve)	
LA Abrasion (ASTM C 131)	35% loss (maximum)
Soundness using Mag. Sulfate (ASTM C 88 5 cycles)	15% loss (maximum)
Total shale, clay, coal and lignite content ASTM C 142	1.0% by weight (max)
Fine Aggregate (Passing the No. 4 Sieve)	
Organic content 1% maximum	1.0 maximum
The parent material of manufactured sand must also meet the requirements for coarse aggregate shown above.	

1. Sampling shall be in accordance with ASTM D 75. Gradation analysis shall be in accordance with Standard Method of Test for Material Finer than No. 200 (75 um) Sieve in Mineral Aggregates by Washing, ASTM C 117 and Standard Method Test for Sieve Analysis of Fine and Coarse Aggregate, ASTM C 136.

2.2 MIXING AND PROPORTIONING

A. Composition of the Mix: Asphaltic concrete mixtures shall consist of Mineral Aggregates and Asphalt Cement within the following limits for the type specified in the plans.

ASPHALTIC CONCRETE TYPE						
	1-01	2-01	3-01	4-01	5-01	6-01
Percent by Weight of Total Mixture						
Asphalt Cement	4-6	4-7	4-7	5-7.5		
Aggregate - U.S. Standard Square Sieve Size Total Percent Passing by Weight						
1½ in (37.5 mm)	100	-	-	-	-	-
1 in (25.4 mm)	75-100	100	-	-	100	-
¾ in (19 mm)	60-85	80-100	100	-	95-100	100
1/2 in (12.5 mm)	-	-	85-100	100	-	86-100
3/8 in (9.5 mm)	40-65	60-80	70-90	85-100	-	75-100
No. 4 (4.75 mm)	30-50	48-65	50-70	55-75	-	-
No. 8 (2.36 mm)	19-36	35-47	37-47	39-50	28 min.	28 min.
No. 16 (1.18 mm)	13-26	25-36	26-36	27-38	-	-
No.30 (0.6 mm)	-	18-30	18-30	19-30	-	-
No. 50 (0.3 mm)	-	12-22	12-22	11-23	-	-
No. 100 (150 um)	4-12	6-14	6-15	6-16	-	-
No. 200 (75 um)	2-10	3-10	4-10	4-10	2-6	2-6

1. In addition to the above limits, the difference between the "Percent Passing Square Mesh Sieve" of successive sieve sizes shall not exceed 25 for types 1-01, 2-01, 3-01, and 4-01.

2. That fraction of material retained on the No. 4 (4.75-mm) Sieve-shall be composed of particles with not less than 75% having two or more fractured faces for asphalt types 1-01, 2-01, 3-01, and 4-01, and not more than 20% by weight of that fraction shall be composed of flat or elongated particles. For Asphalt Types 5-01 and 6-01 only, the total aggregate (coarse aggregate, fine aggregate, and the material passing the No. 200 sieve (75um) shall contain not less than 85% crushed material for intermediate course and surface course.
3. It shall be noted that when the gradation varies appreciably from the single point gradation used in the mix-design, the test properties of the mix will be out of specifications. This condition can occur even though gradation meets the tolerances below.
4. The job-mix formula shall be within the limits specified above. The maximum permissible variation from the job-mix formula, within the specification limits, shall be as follows:

   a. Permissible Gradation Variation from Mix Design Percent by Wt. of Total Mix

	Type	
U. S. Standard Sieve Size	1-01, 5-01 & 6-01	2-01, 3-01, & 4-01
No. 4 (4.75 mm) and larger	5.0	4.0
No. 8, 16, 30 and 50 (2.4, 1.2, 0.6, 0.3 mm)	4.0	3.0
No. 200 (75 um)	2.0	1.0
Asphalt Cement	0.5 (1-01 only)	0.3

B. Asphalt Mix General Usage

	Surface	Base
Arterial	5-01, 6-01	1-01, 5-01
Collector	3-01, 5-01, 6-01	1-01, 2-01, 5-01
Local/Access	2-01, 3-01, 5-01	1-01, 2-01, 5-01
Paved Trail	2-01, 3-01, 4-01, 5-01	1-01. 2-01, 5-01
Recreational Surface	4-01	1-01, 2-01, 5-01
Parking Lot	2-01, 3-01, 5-01	1-01. 2-01. 5-01

C. Mix Design Criteria: Laboratory Test Specimen(s) of the Paving Mix, combined in proportions of the job-mix formula, shall be prepared and tested in accordance with AASHTO T 245 and the volumetric properties of the compacted paving mixtures as calculated by ASTM procedures using Chapter 4 of the Mix Design Methods for Asphalt Concrete and other Hot-Mix types (MS-2), Sixth Edition, Asphalt Institute referred hereafter as "MS-2". The Marshall procedure and the Voids in the Mineral Aggregate (VMA) shall be as specified in Chapter 5 of the MS-2. The automatic Marshall Hammer may be used when it has been calibrated with a manual hammer.

1. Optionally, for mix type 5-01 and/or 6-01 a Super Gyratory Compactor (SGC) may be used to prepare the asphalt samples for design and quality control testing. The gyratory values to be used for this purpose are Ninitial = 6, Ndesign = 50, and Nmax = 75. If this option is selected, Marshall stability and flow measurements will be waived during design and production. At Ninitial ,the specific gravity of the specimen must be 90.5% or less of Gmm, at Nmax the specific gravity of the specimen must be 98% or less of Gmm
2. The material for the theoretical specific gravity ASTM D 2041 and the material for the Marshall specimens (pucks) shall be cured at 285+/-5°F (140+/-3° C) for two hours in a closed oven after the mix is produced in the laboratory. Also, the plant produced mixture shall be tested when the mix is two hours old. The mixture shall be transported to the laboratory in an insulated container and then stored in a laboratory oven at 140 +/-3°C (285 +/-5°F) for the remainder of the curing period. This procedure shall be used when the water-absorption as determined by ASTM C 127 and ASTM C 128 of any aggregate in the mixture exceeds 1.25%. The mixture shall be compacted at 140 +/-3°C (285 +/-5°F).
3. Test requirements and criteria for the paving mixes under these specifications shall be as follows:
   a. Marshall Stability: 1500 lbs. (6672 N) Min (Types 1-01, 2-01, 3-01, and 4-01), 1800 lbs (8000 N) (Types 5-01 & 6-01).
   b. No. of compaction blows: 50 (for Types 1-01, 2-01, 3-01, and 4-01), 75 (for Types 5-01 & 6-01).
   c. Flow: 0.08-0.16 inches (2-4 mm) max (Types 1-01 – 4-01), .14 inches (3.5 mm) max (Types 5-01 & 6-01).
   d. Air Voids: (Laboratory Specimen) Percent

Base	3-5
Surface	3-5

   e. Voids filled with asphalt;

percent (VFA) Types 5-01 & 6-01	65-75 Percent

   f. Voids in Mineral Aggregate (VMA)

(Nominal Max Size as defined in MS-2)	Percent (min.)
1 1/2" (38 mm)	11
1" (25.4 mm)	12
¾" (19 mm)	13

½" (12.5 mm)	14
3/8" (9.5 mm)	15

i. The VMA properties for mixes 1-01,2-01,3-01, & 4-01 shall be measured in accordance with the procedure described herein and reported on the material data forms; however, there is no minimum criteria controlling VMA associated with these material gradations.

g. The VMA for Mix Types 5-01 & 6-01 shall be the minimum value allowed. For these mixes, the asphalt content should be just to the left side of the low point on the VMA vs. Asphalt Percent curve, not to the "wet" or right (increasing) side of the curve. The VMA requirements shown represent values that may be higher than those obtained in the KC Metropolitan area using locally available materials. The minimum values are values recommended by the Asphalt Institute in MS-2 6th Edition for high quality asphaltic concretes, but may require the use of non-local aggregates. VMA values shown are for 4% air voids and should be used for the design of conventional roadway pavements. During production, the voids can be expected to vary plus or minus 1% of this design value of 4%. Under these conditions, the minimum allowable VMA values should be calculated by interpolation of the chart in MS-2, 6th Edition. For mix types 1-01, 2-01, 3-01, and 4-01, 3% air voids may be used for design. and production may be allowed to vary plus or minus 1% of the design value.

h. The ratio of minus 200 (75 um) material to % Effective asphalt cement (Peff) based on the weight of the aggregate shall be between 0.6-1.2 for Types 5-01 and 6-01.

D. Sampling and Testing of the Mixture: Mixes shall be sampled in accordance with ASTM D 979 and tested in accordance with AASHTO T 245. The mixtures will be tested for binder content in accordance with ASTM D 2172 or D 6307. The recovered aggregate will be sieved in accordance with ASTM D 5444.

E. Mixture Temperature Requirements: The temperature of the completed mix at the plant and at the paver shall be set by the Contractor who shall consider hauling and placing conditions, asphalt specifications as set forth above in section 2.1 materials, and weather limitations set forth below in section 3.1 B. The temperature of Types 5-01 and 6-01 shall not exceed 315° F (157° C) at the point of discharge from the asphalt plant when using PG 64-22 asphaltic oil.

1. When the mix is produced in a batch-type plant, the aggregate shall be weighed accurately in the designated proportions to provide the specified batch weight. The temperature of the aggregate at the time of introduction into the mixer shall be determined by the contractor, with a tolerance of + or - 25° F (16° C). In no case, however, shall the temperature of the mixture exceed the maximum temperature recommended by the manufacturer or supplier of the asphaltic cement (generally 350° F (177° C).

F. Control of Mixing Time: The contractor shall control mixing time to produce asphaltic concrete that is uniformly and thoroughly coated with asphaltic cement.

G. Preparation of Asphalt Cement: The asphalt shall be heated so that it can be distributed uniformly throughout the mix. For mixing applications, the specified temperature generally will be such that the asphalt viscosity is within the range of 150-190 centistokes and shall not exceed 350° F (177° C). The material shall be sufficiently fluid to produce a complete coating on every particle of aggregate within the specified mixing time.

1. The contractor shall maintain calibrated temperature monitoring equipment at the point of discharge from the asphalt plant and at the asphalt tank, and shall supply temperature records upon request.

H. Preparation and Handling of Aggregate: Coarse and fine aggregate shall be stored at the plant in such a manner that the separate sizes will not become intermixed. Cold aggregates shall be carefully fed to the plant in such proportions that surpluses and shortages in the bins will not cause breaks in the continuous operation. When loading aggregate into stockpiles, and into cars, barges, and trucks, the material shall be placed in such a manner as to prevent segregation of aggregate sizes. Stockpiles shall be built in uniform layers not exceeding 5 feet (1.52 m) in depth.

1. Samples of coarse and fine aggregate shall be submitted to an independent testing facility for testing upon request at no additional cost to the City or Engineer. The contractor shall be responsible for the preparation and handling of aggregates to insure that the cold-feed gradations fall within the mix design limits. Cold-feed gradation tests shall be taken as requested by the Engineer.

2. Drying: The aggregate shall be thoroughly dried and heated to provide a paving mix temperature within a tolerance of + or – 25° F. (4° C), of that specified by the approved mix design. The moisture content of the heated and dried aggregate shall not exceed 0.5%. The quantity of material fed through the dryer shall in all cases, be held to an amount which can be thoroughly dried and heated.

I. Inspection and Control of Asphalt Mixing Plant:

1. Tests: During production the Contractor shall have the following test performed by an approved laboratory: AC content, aggregate gradation after removal of AC, marshall density, stability, voids, vma, vfa, and maximum theoretical density.

   a. Accredited in accordance with ASTM D3666; and/or

   b. Approved for Superpave asphalt testing by the State Highway Department in the state where the plant is located.

      i. The individual performing the test must carry a state certification for Superpave testing.

      ii. The laboratory must have an annual certification by an independent testing agency of all testing equipment used for Superpave mix designs, and must also have the Marshall hammer weight and height of drop certified by that same agency.

2. Availability of Test Reports: The results of the latest current test report shall be furnished to the engineer upon request. If the mix is found to be outside of tolerance, or outside the specification limits as specified in 2.2 mixing and proportioning, correction shall be made. Test reports shall be furnished on the following "Asphalt Concrete Test" form or a similar form containing equivalent information.
3. Frequency of Testing: For mixes 1-01 through 4-01, the tests listed in paragraph 2.2 Materials, I. Inspection and Control of Asphalt Mixing Plant, 1. Tests shall be performed a minimum of once for every 3000 tons (2700 metric tons) of asphalt production KCMO (Feb 15, 2002) 3 except during initial startup, or whenever the production asphalt fails one of the following conditions at which time they will be tested every 1000 tons (900 metric tons) until four consecutive tests show compliance with the specifications:
    a. Production void content measured at the plant discharge is 1% below laboratory mix design void content, or more than 5% total void content.
    b. Extracted gradation of the production asphalt exceeds the permissible gradation variation for the mix type being produced.
    c. Asphalt cement exceeds the content variation for the mix type being produced.
4. Frequency of testing: For mixes 5-01 and 6-01, the tests listed in paragraph 1 shall be performed once per day of production, or every 1000 tons (900 metric tons), whichever is less frequent except during initial startup; or whenever the production fails one of the following conditions at which time they will be tested every 500 tons (450 metric tons), or twice per day of production, whichever is less frequent until 4 consecutive tests show compliance with the specifications:
    a. Production void content measured at the plant discharge is less than 3% or more than 5%
    b. Extracted gradation of the production asphalt exceeds the permissible gradation variation for the mix type being produced.
    c. Production vma measured at the plant discharge is below the design minimum vma.
    d. Production vfa measured at the plant discharge is outside the allowable range.
5. Redesign of Asphalt mixes: If four consecutive tests performed as described in paragraph 3 or 4 above show noncompliance with the specifications as enumerated in the subparagraphs of paragraph 3 or 4 above, production of that type of asphalt will immediately cease, and may not be resumed until a new mix design is submitted and approved, or the plant can demonstrate to the engineer an ability to meet specifications. Resumption of asphalt production after a mix redesign or failure of four consecutive tests to meet specifications will be treated as a initial startup for testing purposes.

    ASPLATIC CONCRETE TEST (Verified Mix Design)

Description:				
APWA Type:				
LAB I.D.:		LOT		
Sample Date:		Belt		Tons
Sample I.D.:		Hot Mix		Tons
Supplier:				

Sieve Size	Belt Sample	Hot-Mix Sample*	Single Point Job- Mix Formula	Job-Mix Formula Tolerances
1 in (25.4 mm)				
¾ in (19 mm)				
1/2 in (12.5 mm)				
3/8 in (9.5 mm)				
No. 4 (4.75 mm)				
No. 8 (2.36 mm)				
No. 16 (1.18 mm)				
No.30 (0.6 mm)				
No. 50 (0.3 mm)				
No. 100 (150 um)				
No. 200 (75 um)				

ASTM C 136, C 117, D 544

*Uncompacted Behind paver

**total mix basis

***total aggregate basis

EXTRACTION DATA-ASTM D6307		Plant Setting**	Sample*
	%***		

Aggregate Type	%***	Aggregate Type	%***

MARSHALL CHARACTERISTICS (ACCEPTANCE (CRITERIA)			
Compaction Blows (average of 3 specimens), Circle one (50 Types A-D, 75 Types E-F)			
	Sample*	Specifications	
Stability, lbs (kg)		Min	AASHTO T 245
Flow, 1/100 in (mm)		Max	AASHTO T 245
% Voids		3-5	
%VMA		___ min	
% VFA			
Density, pcf (kg/cu.m)		___	ASTM D 2726
Ratio (-) 75 um (No. 200) to % Eff. Binder			
Max Theoretical Specific Gravity Gmm		___	ASTM D 2041
Bulk Spec. Gr. Of total Agg. Gsb		___	ASTC C 127 & 128
COMMENTS:			

LOT DENSITY SHALL BE TIED TO THE LOT AND DATE (Laboratories shall conform to ASTM D 3666)

PART 3: EXECUTION

3.1 EQUIPMENT REQUIREMENTS

A. Requirements for Asphalt Paving Equipment: All asphalt paving equipment used by the Contractor shall meet the requirements of this section and shall be maintained in acceptable mechanical condition. Equipment shall be serviced and lubricated away from the paving site. Units that drip fuel, oil, grease or other fluids shall be removed from the project until such leakage is corrected.

1. Pavers and Laydown Machines:

a. Mechanical self-powered pavers shall be capable of spreading the mix within the specified tolerances, true to the line, grade and crown indicated on the plans.

b. Pavers shall be in good working condition, equipped with quick and efficient steering devices and shall be capable of traveling both forward and in reverse. They shall be equipped with hoppers and distributing screws that place the mix evenly in front of the adjustable screeds. They shall be equipped with either a vibrating screed or a tamping bar immediately preceding a static screed. The paver shall be equipped with a shoe that will produce a joint between laying strips having its face inclined at an angle of thirty degrees (30°) from the vertical. This type joint shall be used with all asphaltic concrete mixes. The shoe shall be designed in such a manner that it will be capable of beveling depths up to 4 inches (10.16 cm).

c. There shall be sufficient auxiliary attachments for the paving machine so that it may be operated to lay the necessary width as determined in the field by the engineer. Vibrating screed or tamp bars shall be provided for the full width of all paving operations.

d. The screed shall include a strike-off device which is effective on mixes at workable temperatures without tearing, shoving or gouging them, and which produces a finished surface of an even and uniform texture. The screed shall be adjustable as to the height and crown and shall be equipped with a controlled heating device for use when required. However, for irregular width paving, hydraulic extensions without tamping bars or a vibrating screed may be used only along the curb or outer edge of pavement.

e. Automatic Screed Controls: The paver shall be equipped with and use an approved system capable of automatically controlling the elevation and transverse slope of the paver screed unless otherwise directed by the engineer. An erected stringline, traveling stringline or other approved device operating on the roadbed being paved or the surface of the previously placed lane shall be used to establish the grade reference. The grade reference device shall operate on either or both sides of the paver as required and shall be capable of maintaining the desired transverse slope regardless of changes in the screed elevation. In the event of failure of the automatic screed control system, the contractor will be permitted to continue placing the asphaltic concrete mix for the rest of the day in which the failure occurred. The contractor will not be permitted to continue operations without using automatic screed controls unless permission has been granted by the engineer on each succeeding day following the failure.

f. The traveling stringline shall be constructed in such a manner that it does not vibrate or cause the sensor to make erroneous readings during the laydown operation. The length of the beam to be used shall be approved by the Engineer and shall be between 20 feet and 40 feet (6.1 and 12.2 m).

g. The use of the automatic screed control devices on asphalt pavers will not be required for paving small irregular areas, entrances, approaches, or side street connections.

h. Automatic screed control devices will be required for matching the joint with all previously laid strips, except for those areas noted above.

2. Rollers: Compaction equipment shall consist of vibratory steel wheel, static steel wheel and pneumatic-tired rollers unless otherwise directed by the engineer. They shall be self-propelled and equipped with such controls that starting, stopping and reversing direction can be accomplished without displacing the hot asphaltic concrete pavement. Compaction equipment shall be in good working condition.

   a. Rollers shall be equipped with adjustable scrapers to keep the wheel surfaces clean and with efficient means of keeping them wet to prevent mixes from sticking. The roller surfaces shall have no flat areas, openings or projections that will mar the surface of the pavement.

   b. Steel-Wheeled Rollers: Steel-Wheeled Rollers shall be vibratory or static two-axle tandem rollers. Vibratory rollers shall develop contact pressure of 250 to 350 pounds per inch of width (45 to 62.5 kg per cm of width) (vibratory mode)

or 150 to 180 pounds per inch of width (26.8 to 32 kg per cm of width) (static mode). Static rollers shall be an 8 to 12 ton roller. The weight of the roller will be varied, by order of the engineer, to obtain contact pressures that will result in the required density.

c. Pneumatic-Tired Rollers: Pneumatic-tired rollers shall consist of two axles on which are mounted an odd number of pneumatic tired wheels of equal size and diameter. The roller shall have at least nine pneumatic-tired wheels mounted in such a manner that the rear group of wheels will not follow in the tracks of the forward group, but shall be spaced to give essentially uniform coverage with each pass. There shall be a minimum of ¼ inch (0.636cm) overlap in the tracking between the forward and rear wheels. Axles shall be mounted in a rigid frame provided with a loading platform or body suitable for ballast loading. Tires shall be smooth and inflated to 90 p.s.i. (620 kPa). Construction of the roller shall be such that each wheel is loaded to a minimum of 2,300 pounds (1043 kg). Wheel loadings may be varied by order of the engineer to obtain contact pressures that will result in the required density.

d. Trench Rollers: Trench rollers shall have an auxiliary wheel that operates outside the area to be compacted at such a distance from the pavement edge as to cause no damage thereto. It shall be mounted upon an axle that is adjustable in height. The auxiliary wheel shall be kept in adjustment so that the compression wheels will develop a smooth, compacted surface true to crown and grade. The contact pressure of the compression wheels shall be from 250 to 350 pounds per inch of width (45 to 62.5 kg per cm of width).

e. In lieu of the above requirements pertaining to non-vibratory compaction equipment, consideration will be given to use other types of equipment that are capable of producing equivalent results consistent with the requirements of the specifications.

3. Pressure Distributor: The pressure distributor shall meet the requirements of Section 2204 3.1 Construction, A. entitled "Pressure Distributor."

4. Hand Tools: The Contractor shall provide sufficient lutes, rakes, shovels, tamping tools and other equipment as required to produce results consistent with the specifications.

3.2. CONSTRUCTION

A. Preparation of the Area to be Paved:

1. The area to be paved shall be true to line and grade, and shall have a properly prepared surface prior to the start of the paving operations. It shall be free from all loose or foreign material.

2. Where a base is rough or uneven, a leveling course shall be placed and properly compacted before the placing of subsequent courses.

3. When leveling course is not required, all depressions and other irregularities shall be patched or corrected, and the work approved by the Engineer before the paving operation begins.

4. The area to be paved shall be primed or tacked uniformly in accordance with the provisions of Section 2204 entitled "Prime and Tack Coat".

5. The surfaces of curbs, gutters, vertical faces of existing pavements and all structures in actual contact with asphalt mixes shall be painted with a thin, complete coating of asphaltic material to provide a closely bonded, watertight joint.

B. Weather Limitations:

1. When the moisture of the aggregate in the stockpile or from the dryer interferes with the quality of mix production, or with normal plant operations, or when pools of water are observed on the surface to be paved, the mixing and placing of hot-mix asphalt will not be permitted without the permission of the Engineer.
2. Hot Mix asphalt paving shall not be mixed or placed when the ambient air or base temperature is below 40° F (4.4° C), or when there is frost in the subgrade or any other time when weather conditions are unsuitable for the type of material being placed without expressed approval of the Engineer.
3. Asphalt mix laydown temperatures and rolling times shall conform to the following table:

Minimum Laydown Temperature			
Base Temp.	1-1/2"	2"	3" and Greater
40-50° F (4.4-10° C)	300° F (149° C)	285° F (141° C)	275° F (135° C)
50-60° F (10-16° C)	295° F (146° C)	280° F (138° C)	270° F (132° C)
60-70° F (16-21° C)	285° F (141° C)	275° F (135° C)	265° F (129° C)
70-80° F (21-27° C)	280° F (138° C)	270° F (132° C)	265° F (129° C)
80-90° F (27-32° C)	270° F (132° C)	265° F (129° C)	260° F (127° C)
90°+ F (32°+ C)	265° F (129° C)	260° F (127° C)	255° F (124° C)
Rolling Time	12 minutes	15 minutes	15 minutes

a. Regardless of the temperature, final acceptance of the asphalt mat shall be based on density determined in accordance below with section 3.1 E. Density and Surface Requirements. Rolling times shown are maximum times during which target density must be achieved.

C. Spreading and Finishing:

1. The spreading and finishing of each course shall be to the thickness and width indicated on the plans or Special Provisions. The thickness of individual layers shall not exceed the following for the respective type of mixture.

2. The suggested minimum lift thickness shall be three times the nominal maximum size of the mix. Nominal maximum is defined as the first sieve size larger than the sieve which retains at least 10% of the aggregate by weight.

Asphalt Type	Max. Compacted Lift Thickness
Type 1-01	6" (150 mm)
Type 2-01	4" (100 mm)
Type 3-01	3" (76 mm)
Type 4-01	2" (50 mm)
Type 5-01	4" (100 mm)
Type 6-01	3" (76 mm)

   a. Spreading and finishing shall be conducted in the following manner:

3. Mechanical Pavers: The base and surface courses shall be spread and struck-off with a mechanical paving machine meeting the requirements entitled "Pavers and Laydown Machines." The paving machine shall be operated so that the material does not accumulate and remain along the sides of the receiving hopper. The wings of the spreader hopper shall not be emptied (flipped) between truck loads.

   a. Equipment which leaves tracks or indented areas which cannot be corrected in normal operation, or which produces other permanent blemishes or fails to produce a satisfactory surface, shall not be used. The screed auger shall be operated approximately ¾ full and the hopper conveyor shall not be allowed to run out of material during the paving operation.

   b. Longitudinal joints and edges shall be constructed to true lines. Lines for the paver to follow in placing individual lanes will be established parallel to the centerline of the proposed roadway. The paver shall be positioned; and operated to follow closely the established line.

   c. Sufficient trucks shall be used to continuously supply asphalt to the paver. Delays in the paving operation shall be kept to a minimum.

   d. The Contractor shall make every effort to minimize the number of passes heavy equipment makes over uncompleted roadway sections.

   e. When using pavers in echelon, the second paver shall follow the edge of the material placed by the first paver. The length of each laydown pass shall be limited, depending on weather conditions, to assure a hot joint and obtain proper compaction.

   f. As soon as the first load of material has been spread, the texture of the unrolled surface shall be checked to determine its uniformity. Segregation of materials shall not be permitted. If segregation occurs, the spreading operation shall be immediately suspended until the cause is determined and corrected.

   g. Transverse joints in succeeding courses shall be offset at least 2 feet (0.6 m). Longitudinal Joints shall be offset at least 6 inches (150 mm). The longitudinal

joints shall be laid out so that the surface joint is under the lane markings where possible.

h. Any irregularities in alignment left by the paver shall be corrected directly behind the machine. Immediately after the correction, the edge of the course shall be thoroughly compacted by tamping. Distortion of the pavement during this operation shall be avoided.

i. Edges against which additional pavement is to be placed shall be placed on a 30° (2:1) bevel, or as specified by the engineer. Any irregularities in the surface of the pavement course shall be corrected directly behind the paver. Excess material forming high spots shall be removed by a shovel or lute. Indented areas shall be filled with hot mix and smoothed. Broadcasting of material shall not be permitted.

4. Hand Spreading: In small areas where the use of mechanical finishing equipment is not practical, the mix may be spread and finished by hand. The material shall be distributed uniformly to avoid segregation of the coarse and fine aggregate. Broadcasting of material shall not be permitted. During the spreading operation, all material shall be thoroughly and uniformly distributed by lutes or rakes. Material that has formed into lumps and does not break down readily shall be removed. Following placing and before rolling, the surface shall be checked with templates and straightedges and all irregularities corrected.

D. Compaction:

1. General:

a. A minimum of three rollers shall be used for compacting mixes unless otherwise approved by the engineer. These rollers shall meet the requirements of Section 3.1 Equipment Requirements, A., 2. entitled "Rollers." Additional rollers shall be used as necessary to provide specified pavement density.

b. Immediately after spreading, each course of the pavement mixture shall be compacted by rolling. The initial or “breakdown” rolling shall be accomplished with a steel-wheeled roller meeting the requirements of 3.1 Equipment Requirements, A., 2., b. entitled “Steel-Wheeled Rollers” and shall take place as closely behind the laydown machine as the temperature and condition of the mat will allow. The pneumatic-tired roller shall be used to knead and compact the pavement mixture following the initial rolling and preceding the final rolling. Care shall be exercised in the use of the pneumatic-tired roller to ensure that the pavement mixture is sufficiently cooled to avoid “picking up” of the mixture on the tires of the roller, and also to ensure that the pneumatic-tired rolling is completed before the mixture becomes too cool to allow satisfactory finish rolling. Final, or finish rolling shall be done with a steel- wheeled roller. The sequence of rolling operations may be changed with the approval of the engineer. All rolling shall be longitudinal, starting near the edge of the pavement and progressing toward the center, overlapping on successive trips by not less than one-third (1/3) and no more than one-half (1/2) the width of the roller. Alternate trips of the roller shall be of slightly different lengths.

c. The motion of the roller shall be slow enough at all times to avoid displacement of the hot mixture. The initial compaction roll shall be accomplished with the roller

drive wheel leading the tiller wheel. Any displacement occurring as a result of reversing the direction of the roller, or from any other cause, shall be corrected immediately by the use of rakes and fresh mixture when required. To prevent adhesion of the mixture to the roller, the wheels shall be kept properly moistened, but excess water will not be permitted.

d. The surface of the mixture after compaction shall be smooth and true to established section and grade. Any surface which is segregated, or is in any way defective, shall be removed and replaced with fresh hot mixture at the Contractor's expense, and shall be immediately compacted to conform with the surrounding area.

2. Rolling Procedure:

a. Thin Layers (Lifts): When placing a thin lift (less than 2 in.[50 mm] compacted thickness) in single-lane width or full width, the mixture should be rolled in the following sequence:

i. Transverse joint.

ii. Outside edge.

iii. Breakdown rolling, beginning on the low side.

iv. Intermediate rolling; same procedure as Step 3.

v. Finish rolling.

b. When paving a thin lift in echelon, or when abutting a previously placed lane or other lateral restraint, the mixture should be rolled in the following sequence:

i. Transverse joint.

ii. Longitudinal joint.

iii. Outside edge.

iv. Breakdown rolling, beginning on the low side.

v. Intermediate rolling; same procedure as Step 4.

vi. Finish rolling.

c. Thick Layers (Lifts): When placing a thick lift (2 in. [50 mm] or more compacted thickness) in single-lane width or full width, the mixture should be rolled in the following sequence:

i. Transverse joint.

ii. Breakdown rolling, beginning 12 to 15 in.(300 to 380 mm) interior to the lower unsupported edge. The return pass shall be made with the edge of the roller 3 inches (76 mm) exterior to the unsupported edge of the pavement.

iii. Breakdown rolling of outside edge. Repeat the process described in Step 2 above on the other longitudinal edge.

iv. Intermediate rolling, beginning on the low side.

v. Finish rolling.

d. When paving a thick lift in echelon, or when abutting a previously placed lane or other lateral restraint, the mixture should be rolled in the following sequence:

   i. Transverse joint.

   ii. Longitudinal joint.

   iii. Breakdown rolling, beginning at the longitudinal joint.

   iv. Intermediate rolling, beginning on the low side.

   v. Finish rolling.

e. When paving in echelon, 2-3 inches (5.08-7.62 cm) of the first mat shall be left unrolled, and rolled when the joint between the lanes is rolled and after the 2nd mat is placed. Edges shall not be exposed more than fifteen minutes without being rolled. Particular attention shall be given to the construction of transverse and longitudinal joints in all courses.

f. In laying a surface mix adjacent to any finished area, it shall be placed sufficiently high so that, when compacted, the finished surface will be true and uniform. Where the grade is slight a level will be used to insure drainage to the desired outlet.

3. Transverse joints:

   a. When the transverse joint is next to an adjoining lane, the first pass shall be made with a static steel-wheeled roller moving along the longitudinal joint for a few feet. The surface will then be checked with a straightedge and corrections shall be made if necessary. The joint then shall be rolled transversely, with 6 in.(150 mm) of the drum width on the newly laid material. This operation shall be repeated with successive passes, each covering an additional 6 to 8 in.(150 to 200 mm) of the new mat, until the entire width of a drive roll is on the new mixture. During transverse rolling, wooden boards of the proper thickness should be placed at the edge of the pavement to give the roller a surface to drive on once it passes the edge of tile Mat. if boards are not used, transverse rolling must stop 6 to 8 in. (150 to 200 mm) short of the outside edge to prevent damaging it, and the edge must be compacted later during longitudinal rolling. Transverse joints shall be carefully constructed and thoroughly compacted to provide a smooth riding surface. If the joint has been distorted, it shall be trimmed to a line. The joint face shall be tacked before the fresh material is placed against it.

4. Longitudinal joints:

   a. Longitudinal joints shall be rolled directly behind the paving operation. The edge to be joined shall be tack coated. The paver screed shall be set to overlap the first mat by 1-2 inches (25-50 mm). The elevation of the screed above the surface of the first mat should be equal to the amount of roll-down expected during compaction of the new mat. For large aggregate mixes, the coarse aggregate in the material overlapping the cold joint should be carefully removed and wasted, leaving only the finer portion of the mixture to be pressed into the compacted lane at the time the joint is rolled. For mixes with smaller coarse aggregate, such as surface courses, the overlapping material should be pushed with a lute into a hump over the joint area prior to compaction.

5. Edges:
    a. The edges of the pavement shall be rolled concurrently with or immediately after rolling the longitudinal joint. Care shall be exercised in consolidating the material along the entire length of the edges. Before compaction, the materials along the unsupported edges shall be slightly elevated with a tamping tool or lute. This will permit the full weight of the roller wheel to bear on the material to the extreme edges of the mat. In rolling pavement edges, roller wheels shall extend approximately two inches (5cm) beyond the pavement edge, provided lateral displacement is not excessive.
6. Breakdown Rolling:
    a. Breakdown rolling shall immediately follow the rolling of the longitudinal joint and edges. Rollers shall be operated as close to the paver as necessary to obtain adequate density without causing undue displacement. The breakdown roller shall be operated with the drive wheel nearest the laydown machine. Exceptions may be made by the Engineer when working on steep slopes or super-elevated curves.
7. Intermediate Rolling:
    a. Pneumatic-tired rollers as specified in Section 3.1 Equipment Requirements, A., 2. entitled "Rollers," shall be used for intermediate rolling. The intermediate rolling shall follow the breakdown rolling as closely as possible and while the paving mix is still of a temperature that will result in maximum density from this operation. Pneumatic-tired rolling shall be continuous after the initial rolling until all of the mix placed has been compacted to the required density. Turning of pneumatic-tired rollers on the hot paving mix which causes displacement shall not be permitted.
8. Finish Rolling:
    a. The finish rolling shall be accomplished while the material is still warm enough for the removal of roller marks. All roller marks shall be removed by the finish rolling operation. All rolling operations shall be conducted in close sequence.
9. In places inaccessible for the operation of standard rollers as specified, compaction shall be performed by trench rollers or others meeting the requirements of Section 3.1 Equipment Requirements, A., 2. entitled "Rollers." The trench roller shall be operated until the lift is thoroughly compacted. Hand tamping, manual or mechanical, may be used in such areas, if such operations will give the required density.

E. Density and Surface Requirements:
1. The completed asphalt concrete paving shall have a density equal to or greater than 95% for Type 1-01 and 5-01 Asphalt Concrete Base and 96% for Types 2-01, 3-01, 4-01, 5-01 and 6-01 Asphalt Concrete Surface. Density is based on laboratory specimens prepared as specified in Section 2.2 Mixing and Proportioning, C. entitled "Mix Design Criteria" and made from plant mix conforming to the job mix formula. Density testing shall conform to ASTM D 2950 or ASTM D 2726 or D 1188.

2. If cores are used to determine density, one or more tests (one test equals three cores) will be taken for each tonnage lot and averaged to determine acceptance. Two cores will be taken from the lane being paved, and one core centered on the longitudinal joint with the adjoining lane. The compacted surface shall be 0-1/4 in. (0-6 mm) above the edge of curb. All unsatisfactory work shall be repaired, replaced or corrected. The surface of the final course shall be of a uniform texture and conform to line and grade shown on the plans.
3. The field control density will be based on the density of plant produced mix compacted in a laboratory in accordance with Section 2.2 Mixing and Proportioning, C. Mix Design Criteria.

END OF SECTION 02205

SECTION 02315 - TRENCH BACKFILL

PART 1: GENERAL

1.1. REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Public Works Association (APWA): Uniform Color Code for Temporary Marking of Underground Utility Locations.
2. ASTM International (ASTM):
   a. C33, Standard Specification for Concrete Aggregates.
   b. C94/C94M, Standard Specification for Ready-Mixed Concrete.
   c. C117, Standard Test Method for Materials Finer than 75 Micrometer (No. 200) Sieve in Mineral Aggregates by Washing.
   d. C136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
   e. C150, Standard Specification for Portland Cement.
   f. C618, Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
   g. D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
   h. D1140, Standard Test Method for Amount of Material in Soils Finer than the No. 200 (75 micrometer) Sieve.
   i. D1557, Standard Test Method for Laboratory Compaction Characteristics of Soil using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3)).
   j. D3776, Standard Test Methods for Mass Per Unit Area (Weight) of Fabric.
   k. D4253, Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.
   l. D4254, Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.
   m. D4318, Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
   n. D4533, Standard Test Method for Trapezoid Tearing Strength of Geotextiles.
   o. D4832, Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.
   p. D4991, Standard Test Method for Leakage Testing of Empty Rigid Containers by Vacuum Method.
   q. D5034, Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).
3. National Electrical Manufacturers Association (NEMA): Z535.1, Safety Color Code.

1.2. DEFINITIONS

A. Base Rock: Granular material upon which manhole bases and other structures are placed.

B. Bedding Material: Granular material upon which pipes, conduits, cables, or duct banks are placed.

C. Imported Material: Material obtained by Contractor from source(s) offsite.

D. Lift: Loose (uncompacted) layer of material.

E. Pipe Zone: Backfill zone that includes full trench width and extends from prepared trench bottom to an upper limit above top outside surface of pipe, conduit, cable or duct bank.

F. Prepared Trench Bottom: Graded trench bottom after excavation and installation of stabilization material, if required, but before installation of bedding material.

G. Relative Compaction: The ratio, in percent, of the as-compacted field dry density to the laboratory maximum dry density as determined by ASTM D698. Corrections for oversize material may be applied to either as-compacted field dry density or maximum dry density, as determined by Engineer.

H. Relative Density: As defined by ASTM D4253 and ASTM D4254.

I. Selected Backfill Material: Material available onsite that Engineer determines to be suitable for a specific use.

J. Well-Graded: A mixture of particle sizes that has no specific concentration or lack thereof of one or more sizes producing a material type that, when compacted, produces a strong and relatively incompressible soil mass free from detrimental voids. Well-graded does not define any numerical value that must be placed on the coefficient of uniformity, coefficient of curvature, or other specific grain size distribution parameters.

1.3. SUBMITTALS

A. Informational Submittals:

1. Catalog and manufacturer's data sheets for compaction equipment.

2. Controlled Low Strength Material: Certified mix design and test results. Include material types and weight per cubic yard for each component of mix.

PART 2: PRODUCTS

2.1. TRENCH STABILIZATION MATERIAL

A. Granular Backfill:

1. Clean gravel or crushed rock, reasonably well-graded from coarse to fine.

2.2. BEDDING MATERIAL AND PIPE ZONE MATERIAL

A. Unfrozen, friable, and no clay balls, roots, or other organic material.

2.3. GRANULAR DRAIN MATERIAL

A. Crushed Limestone or Dolemite.

B. Gradation 1 or 2 in accordance with ASTM C117 and ASTM C136 shall be used.

1. Sieve Size	**Percent Passing By Weight**
1-1/2 inches	100
1 inch	95-100
1/2 inch	25-60
No. 4 (4.75 mm)	0-10
No. 8 (2.36 mm)	0-5

2. Sieve Size	Percent Passing By Weight
1 inch	100
3/4 inch	90-100
3/8 inch	20-55
No. 4 (4.75 mm)	0-10
No. 8 (2.36 mm)	0-5

2.4. EARTH BACKFILL

A. Soil, loam, or other excavated material suitable for use as backfill.

B. Free from roots or organic matter, refuse, boulders and material larger than 1/2 cubic foot, or other deleterious materials.

2.5. PROCESSED EARTH BACKFILL

A. Class A Backfill: Earth backfill, meeting the following additional requirement.

1. Free of boulders and cobbles that would be retained on a 6-inch screen.

2.6. CONTROLLED LOW STRENGTH FILL

A. Select and proportion ingredients to obtain compressive strength between 50 and 150 psi at 28 days in accordance with ASTM D4832.

B. Materials:

1. Cement: ASTM C150, Type I or Type II.
2. Aggregate: ASTM C33, Size 7.
3. Fly Ash (if used): ASTM C618, Class C.
4. Water: Clean, potable, containing less than 500 ppm of chlorides.

2.7. CONCRETE BACKFILL

A. N/A

2.8. SOURCE QUALITY CONTROL

A. Perform gradation analysis in accordance with ASTM C136 for:

1. Earth backfill, including specified class.

2. Trench stabilization material.
3. Bedding and pipe zone material.

B. Certify Laboratory Performance of Mix Designs:

1. Controlled low strength fill.
2. Concrete.

PART 3: EXECUTION

3.1. TRENCH PREPARATION

A. Water Control:

1. Promptly remove and dispose of water entering trench as necessary to grade trench bottom and to compact backfill and install manholes, pipe, conduit, direct-buried cable, or duct bank. Do not place concrete, lay pipe, conduit, direct-buried cable, or duct bank in water.
2. Remove water in a manner that minimizes soil erosion from trench sides and bottom.
3. Provide continuous water control until trench backfill is complete.

B. Remove foreign material and backfill contaminated with foreign material that falls into trench.

3.2. TRENCH BOTTOM

A. Firm Subgrade: Grade with hand tools, remove loose and disturbed material, and trim off high areas and ridges left by excavating bucket teeth. Allow space for bedding material if shown or specified.

B. Soft Subgrade: If subgrade is encountered that may require removal to prevent pipe settlement, notify Engineer. Engineer will determine depth of overexcavation, if any required.

3.3. TRENCH STABILIZATION MATERIAL INSTALLATION

A. Rebuild trench bottom with trench stabilization material.

B. Place material over full width of trench in 6-inch lifts to required grade, providing allowance for bedding thickness.

C. Compact each lift so as to provide a firm, unyielding support for the bedding material prior to placing succeeding lifts.

3.4. BEDDING

A. Furnish imported bedding material where, in the opinion of Engineer, excavated material is unsuitable for bedding or insufficient in quantity.

B. Place over the full width of the prepared trench bottom in two equal lifts when the required depth exceeds 8 inches.

C. Hand grade and compact each lift to provide a firm, unyielding surface.

D. Minimum Thickness: As follows, except increase depths listed by 2 inches in areas of rock excavation:

1. Pipe 15 Inches and Smaller: 4 inches.
2. Pipe 18 Inches to 36 Inches: 6 inches.
3. Pipe 42 Inches and Larger: 8 inches.
4. Conduit: 3 inches.
5. Direct-Buried Cable: 3 inches.
6. Duct Banks: 3 inches.

E. Check grade and correct irregularities in bedding material. Loosen top 1 inch to 2 inches of compacted bedding material with a rake or by other means to provide a cushion before laying each section of pipe, conduit, direct-buried cable, or duct bank.

F. Install to form continuous and uniform support except at bell holes, if applicable, or minor disturbances resulting from removal of lifting tackle.

G. Bell or Coupling Holes: Excavate in bedding at each joint to permit proper assembly and inspection of joint and to provide uniform bearing along barrel of pipe or conduit.

3.5. BACKFILL PIPE ZONE

A. Upper limit of pipe zone shall not be less than following:

1. Pipe: 12 inches, unless shown otherwise.
2. Conduit: 3 inches, unless shown otherwise.
3. Direct-Buried Cable: 3 inches, unless shown otherwise.
4. Duct Bank: 3 inches, unless shown otherwise.

B. Restrain pipe, conduit, cables, and duct banks as necessary to prevent their movement during backfill operations.

C. Place material simultaneously in lifts on both sides of pipe and, if applicable, between pipes, conduit, cables, and duct banks installed in same trench.

1. Pipe 10-Inch and Smaller Diameter: First lift less than or equal to 1/2 pipe diameter.
2. Pipe Over 10-Inch Diameter: Maximum 6-inch lifts.

D. Thoroughly tamp each lift, including area under haunches, with handheld tamping bars supplemented by “walking in” and slicing material under haunches with a shovel to ensure that voids are completely filled before placing each succeeding lift.

E. After the full depth of the pipe zone material has been placed as specified, compact the material by a minimum of three passes with a vibratory plate compactor only over the area between the sides of the pipe and the trench walls.

F. Do not use power-driven impact compactors to compact pipe zone material.

3.6. BACKFILL ABOVE PIPE ZONE

A. General:

1. Process excavated material to meet specified gradation requirements.
2. Adjust moisture content as necessary to obtain specified compaction.
3. Do not allow backfill to free fall into the trench or allow heavy, sharp pieces of material to be placed as backfill until after at least 2 feet of backfill has been provided over the top of pipe.
4. Do not use power driven impact type compactors for compaction until at least 4 feet of backfill is placed over top of pipe.
5. Backfill to grade with proper allowances for topsoil, crushed rock surfacing, and pavement thicknesses, wherever applicable.
6. Backfill around structures with same class backfill as specified for adjacent trench unless otherwise shown or specified.

B. Class A Backfill:

1. Place in lifts not exceeding thickness of 9 inches.
2. Mechanically compact each lift to a minimum of 95 percent relative compaction prior to placing succeeding lifts.

C. Class D Backfill: Backfill trench above the pipe zone with granular backfill in lifts not exceeding 8 inches. Compact each lift to a minimum of 95 percent relative compaction prior to placing succeeding lifts.

D. Concrete Backfill:

1. Place above bedding.
2. Minimum Concrete Thickness: 6 inches on top and sides of pipe.
3. Do not allow dirt or foreign material to become mixed with concrete during placement.
4. Allow sufficient time for concrete to reach initial set before additional backfill material is placed in trench.
5. Prevent flotation of pipe.
6. Begin and end concrete backfill within 4 inches of a pipe joint on each end.
7. Do not encase pipe joints except within the limits of the concrete backfill.

E. Controlled Low Strength Fill:

1. Discharge from truck mounted drum type mixer into trench.
2. Place in lifts as necessary to prevent uplift (flotation) of new and existing facilities.
3. In traveled areas fill entire trench section to pavement finish grade for a temporary driving surface, and screed off excess and finish with a float.
4. In other areas fill the trench section as shown.

3.7. REPLACEMENT OF TOPSOIL

A. Replace topsoil in top 12 inches of backfilled trench.

B. Maintain the finished grade of topsoil even with adjacent area and grade as necessary to restore drainage.

3.8. MAINTENANCE OF TRENCH BACKFILL

A. After each section of trench is backfilled, maintain the surface of the backfilled trench even with the adjacent ground surface until final surface restoration is completed.

B. Gravel Surfacing Rock: Add gravel surfacing rock where applicable and as necessary as specified in Section 02700, Crushed Stone Resurfacing to keep the surface of the backfilled trench even with the adjacent ground surface, and grade and compact as necessary to keep the surface of backfilled trenches smooth, free from ruts and potholes, and suitable for normal traffic flow.

C. Topsoil: Add topsoil where applicable and as necessary to maintain the surface of the backfilled trench level with the adjacent ground surface.

D. Concrete Pavement: Replace settled slabs as specified in Section 03303, Portland Cement Concrete Pavement.

E. Asphaltic Pavement: Replace settled areas or fill with asphalt as specified in Section 02205, Asphaltic Concrete Surface and Base.

F. Other Areas: Add excavated material where applicable and keep the surface of the backfilled trench level with the adjacent ground surface.

3.9. SETTLEMENT OF BACKFILL

A. Settlement of trench backfill, or of fill, or facilities constructed over trench backfill will be considered a result of defective compaction of trench backfill.

END OF SECTION 02315

SECTION 02400 - SHORING

PART 1: GENERAL

1.1. DESCRIPTION:

A. The work of this section shall consist of furnishing all equipment, labor, materials, tools, and incidentals necessary to provide for the protection of the personnel and to protect the excavations for both structural and trenching and existing structures; and as required by the applicable federal and state laws and regulations.

PART 2: PRODUCTS

2.1. NOT USED

PART 3: EXECUTION

3.1. RESPONSIBILITIES:

A. The Contractor is solely and totally responsible for the design, installation, maintenance, and safety of any shoring and/or bracing that may be required.

3.2. TYPE OF SHORING AND BRACING:

A. The type of shoring and bracing shall be that which is removable following the installation of the structure. No permanent type of shoring or sheeting shall be used that must remain within the limits of the excavation. The shoring or bracing shall be removed following approval by the Engineer of the excavation, installation of the structure, and installation of required backfill material.

END OF SECTION 02400

SECTION 02700 – CRUSHED ROCK SURFACING

PART 1: GENERAL

1.1. WORK INCLUDED

A. Crushed rock surfacing, compacted

1.2. RELATED WORK

A. Section 02950 – Site Restoration

B. Section 3303 – Portland Cement Concrete Pavement

1.3. REFERENCES

A. ASTM C136 – Sieve Analysis of Fine and Course Aggregates

B. MoDOT – Standard Specifications for State Road and Bridge Construction

1.4. SUMMARY

A. This Section includes the requirements for the replacement of crushed rock surfacing in association with sanitary sewer installation and repair.

B. Division 2 Section "Site Work" for excavation and backfill requirements contain requirements that relate to this Section.

1.5. SUBMITTALS

A. Submit the Gradation of proposed mix from supplier according to the Conditions of the Contract and Division 1 Specification Sections.

PART 2: PRODUCTS

2.1. MATERIALS

A. MoDOT Aggregates for Surfacing: MoDOT Type 1 base rock

PART 3: EXECUTION

3.1. INSPECTION

A. Verify compacted sub-grade is dry, free of organics and ready to receive work of this Section.

B. Verify that gradients and elevations are correct.

C. Contractor shall not begin installation until after acceptance of compacted backfill and final grading by Engineer

3.2. PLACING CRUSHED ROCK SURFACING

A. Spread stone material over prepared base to a total compacted thickness of 4 inches.

B. Place stone, saturate and compact.

C. Compaction shall be accomplished with rubber-tired roller, re-shaped, and then steel roller.

D. Level driving surfaces

E. Maintain aggregate surfacing until project is accepted by Engineer.

END OF SECTION 02700

SECTION 02900 – SEEDING, SODDING AND OVERSEEDING

PART 1: GENERAL

1.1. SCOPE OF WORK

A. This section governs the furnishing of all labor, materials, and equipment for seeding, sodding, and overseeding as shown on the Plans and in accordance with specifications. The Contractor shall furnish all plants and materials and perform all operations in connection with the preparation, fertilizing, placing, watering, firming and establishment, of seeding areas, complete and in strict accordance with these specifications and applicable Plans, and subject to the terms and conditions of the Contract. The Contractor shall seed disturbed areas where shown on the Plans or by field inspection and as required by the Storm Water Pollution Prevention Plan. The Contractor shall be responsible for establishment of grass.

1.2. REFERENCE STANDARDS

A. The following standards are referenced directly in this section. The latest version of these standards shall be used. If conflicting standards are referenced, the more stringent standard shall apply.

1. APWA: 2150 Erosion Control
2. Missouri Highways and Transportation Commission
3. Missouri Standard Specifications for Highway Construction, 2011 Edition
4. MODOT Section 800
5. Federal and State Department of Agriculture Regulations
6. Applicable State Weed Laws, Missouri Revised Statutes Annotated, Chapter 3. Article 13.
7. American Sod Producers Association (A.S.P.A.) “Specifications for Turfgrass Sod”, and “Specifications for Topsoil Material and Application”

1.3. DEFINITIONS

A. Rough Grading is to mean the work necessary to prepare the subgrade for topsoil application and shall be compatible with the surrounding landscape while making a smooth tradition to existing undisturbed conditions.

B. Subgrade is to mean that level of earth below the topsoil layer.

C. Compacted backfill is to mean a compaction of 90 percent standard proctor density for that material.

D. Tolerance is to mean that amount above or below a given line.

E. Certified Sod: State Certified Sod shall be turfgrass sod, grown from certified high quality seed that has been inspected by the State Certification Agency.

F. Certified Seed: A grass or legume seed named variety that has been reviewed and accepted and meets all state and federal requirements, rules and regulations. The seed shall be grown and processed in the United States or Canada and comply with the requirements of the corresponding State Seed Law. Certified Seed shall be packaged and labeled with an inspection certificate from the State Certification Agency stating genetic identity, purity, and freedom from noxious weeks as well as excessive amounts of other crop and weedy plants at time of harvest. Cleaning and conditioning of seed must result in a product that meets or exceeds minimum standards.

G. Establishment Period: A period when planting work has been performed and initially accepted, and there is a Contract requirement to care for the planted areas in some way until the period ends.

H. Fertilizer: The grade of fertilizer will be identified according to the percent nitrogen (N), percent of available phosphoric acid (P205), and percent water soluble potassium (K20), in that order, and approval will be based on that identification.

I. Native Plant (existing): A variety of plant species occurring in its natural habitat without direct or indirect human actions.

J. Noxious Weed: All weed designated by the State Weed Board as injurious to public health, agriculture, recreation, wildlife, or all public or private property. The United States Department of Agriculture (USDA) for the corresponding state will be the authority in determination of noxious weed species.

K. Pure Live Seed (PLS): The amount of living seed in the total quantity of seed when non-viable seed or non-seed material is excluded. The following formula shall be used to determine the amount of commercial seed required to provide each kind of seed for the specified quantities of pure live seeds:

$$\text{Pounds of Commercial Seed Required} = \frac{10{,}000 \times \text{Pure Live Seed (lbs per acre)}}{\text{Purity (Percent)} \times \text{Germination (percent)}}$$

L. Riparian: Related to the bank, shore, or water-influenced areas of a watercourse or water body.

M. Sensitive Areas: Defined areas such as wetlands, natural water and riparian resources, special environmental zones, or where certain activities are restricted such as the use of chemicals.

N. Specified Weeds: All noxious weeds as defined above, and all plant species identified in the Special Provisions or on the Plans as a species to be removed.

O. Weed: A plant that is undesirable where it is growing.

P. Overseeding is the planting of grass seed directly into the existing turf, without tearing up the turf, or the soil.

1.4. SUBMITTALS

A. Prior to delivery to the job site, Contractor shall submit to the Owner for approval the source and supplier of all grass seed, sod, fertilizer and mulch materials, along with the type of equipment to be used on this project and any tests completed. Manufacturer's bulletins, leaflets and other descriptive data which contain cuts, dimensions, and specifications will be acceptable for cataloged materials. Such bulletins, leaflets and other descriptive data shall be clearly marked to show which item is to be used and which paragraph of the contract specification it is to satisfy.

1.5. GUARANTEE

A. The Contractor shall guarantee all work and materials for a period of one full growing season (Spring to Fall) after the date of final acceptance of the project. During the guarantee period, all turf which dies or exhibits weed growth or undesirable grasses, free of eroded areas, bare spots, diseases and insects, shall be replaced with like material at the expense of the Contractor. Contractor to replace as originally specified areas which have failed to survive, as often as required, to establish the seeded/sodded lawn area until accepted, at no additional compensation. Contractor to repair and replace to original condition all damages to property resultant from the sodding operation and all damages as a result from the remedying of these defects, without additional compensation.

PART 2: PRODUCTS

2.1. SEEDING MATERIALS

A. Seed: Seed shall be labeled in accordance with U.S. Department of Agriculture Rules and Regulations under Federal Seed Act. All seed shall be furnished in sealed standard containers unless exception is granted in writing by the Owner. Seed shall be free from noxious weeds and recleaned "Grade A" recent crop seed treated with appropriate fungicide at time of mixing. Seed which has become wet, moldy, or otherwise damaged in transit or in storage will not be acceptable. Seed mix to be used will be identified prior to sowing. The minimum percentage by weight of pure live seed in each lot of seed shall be as follows:

1. Seeding – Mix #1 (Turf Areas)

   Festuca arundinacea, Fineleaf Tall Fescue. Varieties- Houndog V. Rebel Jr., Rebel III, Rebel 3D, Barlexas, Millennium, Southern Choice, Tar Heel, Wolf Pack, Bonsai 2000, Shortstop II Coyote, or other pre-approved substitutes 62.5%

   Poa pratensis, Kentucky Bluegrass. Varieties- Baran, Nassau, Ram I, Nublue, Rugby II, Award, Blacksburg, Challenger, Eagleton, Limousine, Livingston, Midnight, Nuglade, Preakness, Princeton 105, Quantum Leap, 1757 or other approved substitutes 25.0%

   Lolium multiflorum – annual ryegrass 12.5%

2. Seeding – Mix #2 (Low Use Areas)

   Fescure ovina, Sheeps Fescue. Varieties- Azay, Big Horn, or other pre-approved substitutes 15.0%

Fescura rubra subsp. Commutata, Chewings Fescue, Varieties-James town II, Victory, Tiffany, or other approved substitutes 20.0%

Fescuca longifolia, Hard Fescue. Varieties- Spartan, Tournament, Warwick, Discovery, Waldina, Aurora, 4 AG Attila, Reliant II, Scaldis, or other pre-approved substitutes 35.0%

Fescuca ruba subp. Ruba, Creeping Red Fescue. Varieties- Shademaster II, Jasper, Cindy, Pennlawn, or other pre-approved substitutes 30.0%

3. Seeding Rate: Seed mixture shall be sown at the minimum rate of 10 pounds per 1000 square feet for new seeding.

B. Inorganic Fertilizer: Inorganic fertilizer shall be composed of a formula 12-12-12, 13-13-13 or other approved substitute, and shall conform to the applicable State fertilizer laws. Fertilizer shall be of a type that can be uniformly distributed by the application equipment. Fertilizer may be furnished in a dry (granulated) or liquid form. When applied dry, the fertilizer shall be a granular, non-burning chemically combined product composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer. Granular or pellet form shall be uniform in composition, dry and free flowing and shall be delivered to the site in the original unopened containers each bearing the manufacturer's guaranteed analysis. Any fertilizer which becomes caked or otherwise damaged, making it unsuitable for use, will not be accepted. When applied in a liquid form, fertilizer may be chemically combined or may be furnished as separate ingredients.

C. Mulch: Mulch shall be the vegetative type, or wood cellulose fiber type, whichever is specified in the Special Provisions, or as approved by the Owner.

1. Vegetative Type: The vegetative type shall be cereal straw from stalks of oats, rye, wheat or barley and shall be free of prohibited and noxious weed seeds.
2. Materials: The pipe shall be made of PVC plastic pipe having a cell classification of 12454 B or 12454 C as defined in ASTM D 1784.

D. Water: Water, hose and other watering equipment required for the work shall be furnished by the Contractor.

E. Other Materials: Other materials not specifically described but required for a complete and proper planting installation, shall be as selected by the Contractor subject to the approval by the Owner.

F. Equipment: The seeding operation shall be accomplished with equipment suitable for preparing the seed bed, sowing the seed, fertilizing, spreading the vegetative type mulch, or spreading the wood cellulose fiber mulch in accordance with the applicable requirements of the following sub-sections.

G. Top Soil: The Contractor shall make every reasonable effort to stockpile existing top soil prior to excavation and reuse it in the same general locations. No payment will be made for topsoil furnishing and placement necessary due to excessive hauling off of existing top soil on the project site.

H. Qualifications of Workman: Provide at least one person, who shall be present at all times during the execution of this work, who is thoroughly familiar with all materials and installation procedures included in the Sodding and Seeding operations as specified herein.

I. Delivery Containers: Deliver all items to the site in their original containers with all labels intact and legible at time of Owner inspection.

J. Protection: Use all means necessary to protect all materials before, during and after installation, and to protect the installed work and materials of all other trades.

K. Replacements: In the event of damage or rejection, immediately make all repairs and replacements to the approval of the Owner and at no additional cost to the Owner.

L. Weather Conditions: All sodding and seeding shall be performed during favorable weather conditions and only during normal and acceptable planting seasons when satisfactory growing conditions exist. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by Owner. The Contractor assumes full and complete responsibility for all such plantings and operations.

M. Planting Dates: Recommended dates for all seeding and planting shall be March 15 through October 15 unless otherwise approved by the Owner.

N. Pre-planting Inspection: Prior to the work of this section, the Contractor shall carefully inspect the installed work of all other trades and verify that all such work is complete to the point where installation may properly commence.

O. Discrepancies: Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

2.2. SODDING MATERIAL

A. Sod: All grass sod shall be State Certified, nursery grown native mixture of Houndog, Rebel, Pride, Cochise, Coyote or other substitute, as may be approved. Sod shall be a Tall Turf type Fescue with 10 percent Bluegrass that is free of objectionable grassy and broadleaf weeds. Sod shall be considered free of such weeds if less than 5 such plants are present per 100 square feet of area. Sod will not be acceptable if it contains any of the following weeds: Common burmudagrass,(wiregrass), quackgrass, johnsongrass, poison ivy, nutsedge, mumblewill, Canada thistle, bindweed, wild garlic, ground ivy, perennial sorral and bromegrass, or as defined by current weed laws.

1. Pad Size: The sod shall be cut to supplier's standard width and length but not less than 12 x 24 inches and not more than 24 x 72 inches or bigger sizes that are approved by the Owner. There shall not be broken pads, torn or uneven ends.

2. Strength: Root development shall be such that standard size pieces will support their own weight and retain their shape when suspended vertically from a firm grasp on the uppermost 10% of area.

3. Mowing Height: Before harvesting sod, it shall be mowed uniformly at a height of 2 - 2½ inches. The sod shall be stripped or harvested by machine at a uniform thickness of 1½ inches ± ¼ inch. Measurement of thickness shall exclude top growth and thatch.

B. Fertilizer: Fertilizer shall be inorganic 12-12-12 or 13-13-13 grade, uniform in composition, free flowing and suitable for application with approved equipment, delivered to the site in convenient containers, each fully labeled, conforming to applicable state fertilizer laws, bearing the name, trade name, or trademark and warranty of the producer.

C. Top Soil: The Contractor shall make every reasonable effort to stockpile existing top soil prior to excavation and reuse it in the same general locations. No payment will be made for topsoil furnishing and placement necessary due to excessive hauling off of existing top soil on the project site.

D. Qualifications of Workman: Provide at least one person, who shall be present at all times during the execution of this work, who is thoroughly familiar with all materials and installation procedures included in the Sodding and Seeding operations as specified herein.

E. Delivery Containers: Deliver all items to the site in their original containers with all labels intact and legible at time of Owner inspection.

F. Protection: Use all means necessary to protect all materials before, during and after installation, and to protect the installed work and materials of all other trades.

G. Replacements: In the event of damage or rejection, immediately make all repairs and replacements to the approval of the Owner and at no additional cost to the Owner.

H. Weather Conditions: All sodding and seeding shall be performed during favorable weather conditions and only during normal and acceptable planting seasons when satisfactory growing conditions exist. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by Owner. The Contractor assumes full and complete responsibility for all such plantings and operations.

I. Planting Dates: Recommended dates for all seeding and planting shall be March 15 through October 15 unless otherwise approved by the Owner.

J. Pre-planting Inspection: Prior to the work of this section, the Contractor shall carefully inspect the installed work of all other trades and verify that all such work is complete to the point where installation may properly commence.

K. Discrepancies: Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

2.3. NATIVE GRASSES MATERIALS

A. Furnished and installed per Part 2 & 3. Annual plants which sprout rapidly and survive for only one growing season are suitable only for establishing temporary vegetative cover.

1. The seed mix will be as follows:

   Short-grass Mix

   Seeding Rate: 6.42 lb/Acre (40.3 Seeds/ft^2)

GRASSES:

SCIENTIFIC NAME	COMMON NAME	% of Mix	Seeds/ft^2	Rate/Acre
Bouteloua curtipendula	Sideoats Grama	18.69%	2.6	1.200 PLS lb
Elymus canadensis	Canada Wild Rye	9.35%	1.1	0.600 PLS lb
Koeleria cristata	June Grass	1.56%	7.3	0.100 PLS lb
Schizachyrium scoparium	Little Bluestem	34.27%	12.1	2.200 PLS lb
Sporobolus aspera	Rough Dropseed	6.23%	4.4	0.400 PLS lb
Sporobolus cryptandrus	Sand Dropseed	0.31%	2.6	0.020 PLS lb
Sporobolus heterolepsis	Prairie Dropseed	0.16%	0.1	0.010 PLS lb

WILDFLOWERS:

SCIENTIFIC NAME	COMMON NAME	% of Mix	Seeds/ft^2	Rate/Acre
Aster laevis	Smooth Blue Aster	0.31%	0.4	0.020 PLS lb
Astragalus canadensis	Canada Milk Vetch	1.56%	0.6	0.100 PLS lb
Chamaecrista fasciculata	Partridge Pea	6.23%	0.4	0.400 PLS lb
Dalea candidum	White Prairie Clover	0.93%	0.4	0.060 PLS lb
Dalea purpurea	Purple Prairie Clover	6.23%	2.6	0.400 PLS lb
Desmanthus illinoensis	Illinois Bundle Flower	7.79%	0.8	0.500 PLS lb
Desmodium canadense	Showy Tick Trefoil	0.93%	0.1	0.060 PLS lb
Lespedeza capitata	Round-headed Bush Clover	0.31%	0.1	0.020 PLS lb
Ratibida pinnata	Yellow Coneflower	3.12%	3.1	0.200 PLS lb
Rudbeckia hirta	Black-eyed Susan	2.02%	1.5	0.130 PLS lb

2.4. HYDROSEEDING MATERIALS

A. Areas to be hydroseeded shall be fertilized at rates specified in Part 3. The seed-bed shall be free of any irregularities in the surface, and shall be corrected to prevent formation of water pockets. Hydromulch used shall be a wood fiber mulch with tackifier, such as Conwit 2000, or approved equivalent. Hydromulch shall be applied at the rate of 1500 lbs. per acre.

B. Seed and fertilizer, mixed in porportions previously specified, may be broadcast in a hydromulch with water which forms an emulsion and covers the prepared designated areas in a uniform manner.

2.5. OVERSEEDING MATERIALS

A. All designated existing turf areas being overseeded shall use seed previously specified at the rate of 160 pounds per acre in a uniform manner. Areas to be overseeded shall be fertilized at rates previously specified.

PART 3: EXECUTION

3.1. PROTECT AND REPAIR

A. The seeded/sodded area shall be kept free of traffic until accepted. If at any time before acceptance of the completed contract, any portion of the seeded surface becomes gullied or otherwise damaged, or the seeding has been damaged or destroyed, the affected portion shall be repaired to re-establish the specified condition prior to the acceptance of the work.

3.2. ACCEPTANCE OF SEEDING AND SODDING

A. Acceptance: Acceptance by the Owner will occur when areas seeded and/or sodded are determined to be established turf areas ready for mowing. Grass areas in excess of one (1) square foot that are dead or in poor condition regarding color and quality shall be replaced at the Contractor's expense prior to the initiation of the Maintenance Period.

B. Sod Watering: Throughout the Maintenance Period, the Contractor shall be responsible for watering the installed sod until it is established and ready for mowing. In the absence of rainfall, watering shall be performed daily during the first week and shall be sufficient to maintain moist soil to a depth of at least 4 inches. Soil on sod pads shall be kept moist at all times. Watering may be done during the heat of the day to help prevent wilting. After the second week, the Contractor shall water the sod as required to maintain adequate moisture in the upper 4 inches of topsoil necessary for the promotion of deep root growth until final acceptance as established turf areas ready for mowing.

C. Seed Watering: The Contractor shall be responsible for watering seeded areas, keeping all areas moist throughout the germination period, following the substantial germination of the seed, and during the occurrence of a dry or drought period. Continued watering will be required until final acceptance as established turf areas ready for mowing.

D. Acceptance Notification: After acceptance of the seeded or sodded area by the Owner, the Contractor shall by door hangers or other approved methods, notify all affected property owners that the maintenance of the grassed areas is now their responsibility.

3.3. CLEAN-UP

A. During the progress of this work and upon completion, thoroughly clean the project area, remove and properly dispose of all resultant dirt, debris and other waste materials.

3.4. SEEDING CONSTRUCTION

A. All equipment used in the project and all workmanship shall meet the approval of the Owner.

B. All areas to be seeded shall be tilled or disked to a depth of 3-4 inches and raked or smoothed to remove debris, clods, surface stone, 2-inches diameter or larger and weeds. Grades on the areas to be sodded or seeded shall be maintained in true, even and compacted conditions to prevent the formations of depressions. Areas overseeded, to be seeded that have washed or eroded shall be brought to grade and compacted thoroughly by the Contractor prior to placing the seeding or overseeding. No grading shall be done when the soils are in a muddy or frozen condition.

C. Steel Edging: The finish sub-grade of areas to be planted shall be 2" below top of steel edging, if present, for grass sod and flush with top of steel edging for seeding.

D. Other Edges: The finished sub-grade next to curbs, sidewalk and drive approaches shall allow for the seed to be placed level with the improvement. The sub-grade shall be finished level with the improvement for seeding.

E. Fertilizer Application: For areas to be seeded, fertilizer shall be applied when area receives final grading and tillage.

F. Application of Fertilizer: The Contractor has the option to obtain soil tests from a recognized testing laboratory, approved by Owner, to determine soil pH, nitrogen, phosphorus and potassium requirements and organic matter content. A pH or 5.8 to 7.0 and phosphorus and potassium levels of medium or higher range for the particular test used is required. Soils falling below these test levels must be supplemented with the appropriate materials to meet such test levels. If the above soil test is not performed a 13-13-13 fertilizer shall be applied at the rate of 400 pounds per acre.

G. Acceptance of Plant Bed: Acceptance of the plant bed for seeding shall be obtained from the Owner for each section of area as indicated on the Plans. The Contractor shall be responsible for maintaining the accepted areas until the effective date for planting.

H. Sowing shall be accomplished by use of an approved mechanical seeder or drill (hand spreader can be used in small areas), making sure that successive seed strips overlap to provide uniform coverage. Seed should be drilled to a depth of 1/2 inch.

1. Seed mixed in proportions shown in Part 2 may be broadcast by approved sowing equipment. The seed shall be uniformly distributed over the designated areas. The seed shall be covered to an average depth of ½ inch by means of a brush harrow, spike-tooth harrow, chain harrow, cultipacker or other approved device.

2. Areas to be seeded shall be fertilized at rates specified in Part 3. The seedbed shall be free of any irregularities in the surface, and shall be corrected in order to prevent formation of water pockets. All seeded areas are to be completely covered with hydromulch or with straw anchored to the soil a minimum depth of 3 inches by a disc harrow set nearly straight, to properly maintain soil moisture and to provide shade for the newly germinated chutes.

3. Promptly after mulching, wet the seedbed thoroughly, keeping all areas moist throughout the germination period. Protect all turf areas by erecting temporary fences, barriers, signs, etc. as necessary to prevent trampling and disturbance.
4. When delays in operations carry the work beyond the most favorable planting season for the grasses designated, or when conditions are such, by reason of drought, high winds, excessive moisture, or other factors that satisfactory results are not likely to be obtained, the seeding operation shall be stopped and work shall be resumed only when conditions are favorable again or when approved alternative or corrective measures and procedures have been put into effect. If inspection during seeding operations or after indicate there are areas which have been skipped, the sowing of additional seed on these areas will be required.
5. The seeded areas will be inspected for acceptable grass coverage and will be acceptable when grasses designated are growing and are in good condition and no area more than ½ of one percent of the total areas shall be bare, of which no single area shall be more than one foot square in area. Any bare area larger than this will not be acceptable and shall be reseeded.

I. Compaction: Immediately following the completion of seeding operations, the entire area shall be compacted by means of a roller weighing at least 60 but not more than 90 pounds per linear foot of roller.

J. Maintenance Period: The Contractor shall be responsible for maintaining the installed grass seed and sod until all areas are complete and accepted by the Owner.

K. Mulching: Mulching shall be done within 24 hours following the seeding operation except in the case of wood cellulose fiber type mulch.

1. Vegetative Type Mulch: After compacting the surface, mulch shall be uniformly spread at the rate of 1.5 tons per acre by means of a mechanical spreader or other approved means. As soon as the mulch is spread it shall be anchored to the soil a minimum depth of 3 inches by use of a heavy disc harrow, set nearly straight, or a similar approved tool. Discs of the anchoring tool shall be set approximately 9 inches apart. Anchoring shall be accomplished by not more than two passes of the tool.
2. Wood Cellulose Fiber Type: Wood cellulose fiber mulch shall be added to the hydraulic seeder after the proportionate amounts of seed, fertilizer and water, and other approved materials are added. These ingredients shall be mixed to form a slurry which shall be applied at the rate of 1,000 pounds per acre. The mulch shall make a uniform coverage of the soil surface that will be satisfactory to the Owner.

3.5. SODDING CONSTRUCTION

A. Sod shall not be harvested or delivered when excessively wet or dry. Sod shall be harvested, delivered and installed within a period of 36 hours. Protect sod from sun, wind, dehydration, and rain prior to installation that cannot be placed immediately on delivery. Sod showing visible signs of heating or dehydration will be rejected.

B. Areas to be sodded shall be fertilized at the rates specified in Part 2. The sod-bed shall be free of any irregularities in the surface resulting from fertilizing or other operations and shall be corrected in order to prevent the formation of water pockets. Freshly graded areas, which have set long enough to become dry and crusted over, shall be tilled as specified above, prior to placing the sod.

C. The first row of sod should, if possible, be laid in a straight line with subsequent rows placed parallel and tightly against one another. Lateral joints shall be staggered as in brick laying to promote more uniform growth and strength. Care shall be exercised to ensure that the sod in not stretched or overlapped and that all joints are butted tight in order to prevent voids which would otherwise cause air drying of the roots. Where new sod meets existing grassed areas, a straight, vertical edge shall be cut to allow smooth match. Sod shall be watered and firmed in accordance with sections 1 and 2. If it is necessary to walk excessively on newly laid sod or soil, walking boards should be laid for this purpose.

D. Sod shall be laid with staggered joints and at right angles to direction of slope. Sod shall be secured by tamping or rolling. On slopes 4:1 or steeper and in drainage channels, all sod shall be anchored at minimum two-foot intervals to prevent movement under rainfall conditions.

E. The Contractor shall be responsible for having adequate water available at the site prior to and during the installation of the sod and the areas to be seeded. The sod shall be watered immediately after installation to prevent drying during progress of the work. As sodding is completed on any one section, the entire area shall be thoroughly irrigated to a one inch depth below the new sod pad. After a short drying period, the sod shall be rolled with a roller weighing not less than 60 or more than 90 pounds per linear foot to firm the sod pad and smooth minor surface irregularities. Subsequent watering should maintain sod and soil moisture to a depth of at least four inches, supplement rainfall, to promote growth, promote proper rooting to insure sod survival, and to prevent dormancy.

F. Apply second application of fertilizer at the rate of 300 pounds per acre two weeks after laying sod and prior to final acceptance.

G. The sodded areas will be inspected for the acceptable grass coverage and will be acceptable when grasses designated are growing and are in good conditions, and no area more than ½ of one percent of the total area shall be bare or dead, of which no single area shall be more than one foot square in area. Any bare or dead area larger than this will not be acceptable, and shall be resodded.

H. Maintenance Period – The Contractor shall be responsible for maintaining the installed grass seed and sod until all areas are complete and accepted by the Owner.

I. Maintenance of sodded areas shall include watering, weeding, mowing to a 2½ inch height after growth has exceeded 3 inches and prior to a 4 inch growth, replacement and installation of sod as originally specified for sodded areas failing to survive, and repair of rutting, should that occur. Clippings from mowing which mat on the grass are to be removed.

3.6. NATIVE GRASSES CONSTRUCTION

A. Prior to planting the topsoil in the disturbed area shall be tilled to 6 inches and compacted to approximately 80% density.

B. Native grass seed shall be installed using a rangeland type grain drill seeder per the rates stated. Depths of seeding plants should be ½ inch.

C. Spread and crimp 2,000 lbs. per acre of clean straw or hay within seven days of seeding.

D. Contractor shall provide a minimum of one watering after planting to establish the cover crop.

E. Cover crop shall provide 70% cover within 21 days of seeding.

F. Contractor shall guarantee that seeded areas will have 80% cover within two full growing seasons.

G. Contractor shall allow one application of selective herbicides in the spring to control weeds.

H. Care must be taken to comply with manufacturers labels.

3.7. HYDROSEEDING CONSTRUCTION

A. Seed and fertilizer, mixed in proportions previously specified, may be broadcast in a hydromulch with water which forms an emulsion and covers the prepared designated areas in a uniform manner.

B. Areas to be hydroseeded shall be fertilized at rates specified in Part 2. The seed-bed shall be free of any irregularities in the surface, and shall be corrected to prevent formation of water pockets.

C. Hydromulch used shall be a wood fiber mulch with tackifier, such as Conwit 2000, or approved equivalent. Hydromulch shall be applied at the rate of 1500 lbs. per acre.

D. Hydroseeder filling tank should be ½ full of water before adding seed, fertilizer and hydromulch components. Begin agitation while adding remaining water so that a uniform mixture is obtained. Seed, fertilizer and hydromulch components shall not be added to water more than four (4) hours prior to application.

E. Discharge hydromulch slurry mix on prepared soil for uniform distribution.

F. Keep all areas seeded moist throughout germination period. Protect all turf areas by erecting temporary fences, barriers, signs, etc. as necessary to prevent trampling and disturbance.

G. The seeded areas will be inspected for acceptable grass coverage and will be acceptable when grasses designated are growing and are in good condition and no area more than ½ of one percent of the total areas shall be bare, of which no single area shall be more than one foot square in area. Any bare area larger than this will not be acceptable and shall be reseeded.

H. Contractor shall provide a minimum of one watering after planting to establish the cover crop.

I. Cover crop shall provide 70% cover within 21 days of seeding.

J. Contractor shall guarantee that seeded areas will have 80% cover within two full growing seasons.

K. Contractor shall allow one application of selective herbicides in the spring to control weeds.

L. Care must be taken to comply with manufacturers labels.

3.8. OVERSEEDING CONSTRUCTION

A. The seed-bed shall be free of any irregularities in the surface, and shall be corrected in order to prevent formation of water pockets.

B. Seed shall be applied with a seed drill. The seed drill shall verticut the soil to a minimum depth of ½ inch at not more than 1½ inch spacing between furrows.

C. Areas that have washed or eroded shall be brought to grade and compacted prior to overseeding.

D. The seeded areas shall be inspected for acceptable grass coverage and will be acceptable when grasses designated are growing and are in good condition. Not more than ½ of one percent of the designated turf area shall be bare, of which no single area shall be more than one foot square in area. Any area left unseeded larger than this will not be acceptable, and be reseeded.

END OF SECTION 02900

SECTION 02950 - SITE RESTORATION

PART 1: GENERAL

1.1. SCOPE

A. This section covers all work required in surface restoration on private and public properties that are disturbed by construction.

1.2. GENERAL

A. The Contractor shall restore the project site to conditions equal to or better than those existing prior to entry unless otherwise specified.

1. Maintain adequate safety signs, barricades, and lights until final restoration of work area is completed.
2. Public property shall be restored to the requirements of the Owner.

PART 2: PRODUCTS

2.1. NOT USED

PART 3: EXECUTION

3.1. CLEAN UP:

A. The Contractor, upon completion of installation and backfill operations, shall prepare the area for final grading including but not limited to the following items:

1. Clean-up shall follow the backfilling operations as closely as possible.
2. Excess material shall be removed from the site including material that has washed into the stream beds, storm water facilities, streets, etc.
3. Tools, equipment and construction material shall be removed except for in designated storage areas along the pipeline route.
4. Restore surface and sub-surface drainage and provide temporary wash checks where necessary.

3.2. FINISH GRADING

A. The Contractor shall finish grade the area to lines and grades shown on the Plans or if not shown to those that existed prior to the area being disturbed.

B. Special attention shall be directed to assure surface drainage. The area shall be smoothed by raking or dragging.

3.3. SEEDING

A. The requirements set forth under Section 02900 – Seeding and Sodding shall be used as if fully written herein.

3.4. CONCRETE SLABS, DRIVEWAYS, SIDEWALKS REMOVAL & REPLACEMENT

A. The requirements set forth under Section 03303 – Portland Cement Concrete Pavement shall be used as if fully written herein.

B. All other pavements, driveways, sidewalks, slabs, etc., shall be removed and replaced as shown on the plans and as described herein.

3.5. ASPHALTIC CONCRETE SURFACE

A. The requirements set forth under Section 02205 – Asphaltic Concrete Surface and Base shall be used as if fully written herein.

3.6. CRUSHED ROCK SURFACING:

A. The requirements set forth under Section 02700 – Crushed Stone Surfacing shall be used as if fully written herein.

END OF SECTION 02950

SECTION 02952 - CURED-IN-PLACE PIPE LINER (CIPP)

PART 1: GENERAL

1.1. SCOPE

A. This section covers the trenchless rehabilitation of sanitary sewers by the installation of resin-impregnated flexible tube or liner, which is inserted into the original conduit by use of hydrostatic head or air pressure. The resin is cured using either the circulation of hot water or steam within the tube. The Cured-In-Place Pipe (CIPP) shall be continuous and tight fitting.

1.2. SPECIFICATION MODIFICATIONS

A. It is understood that throughout this section these Specifications may be modified by appropriate items in the notes on the Contract Drawings.

1.3. REVISIONS OF STANDARDS

A. When reference is made to a Standard Specification i.e. ASTM, ANSI, AWWA, MCIB, the specification referred to shall be understood to mean the latest revision of said specification as amended at the time of the Notice to Bidders, except as noted on the Drawings.

1.4. REFERENCED DOCUMENTS

A. This specification referenced standards from the American Society for Testing and Materials which are made a part hereof by such reference and shall be the latest edition and revision thereof. In case of conflicting requirements between this specification and these referenced documents, this specification will govern.

B. The following standard specifications are referenced:

1. ASTM D638 - Standard Test Method for Tensile Properties of Plastics
2. ASTM D790 - Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
3. ASTM D2990 - Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics
4. ASTM D5813 - Standard Specification for Cured-in-Place Thermosetting Resin Sewer Pipe
5. ASTM F1216 - Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube.

1.5. SUBMITTALS

A. The Contractor shall provide certifications or shop drawings on all materials provided under these specifications in accordance with the Submittals section of the project specifications. The Contractor shall submit the following to the Owner and/or Engineer prior to actual work:

1. Manufacturer's certified copies of test reports of factory tests required by the applicable standards of this section.
2. Correspondence from the liner manufacturer stating that Contractor is certified to install the manufacturer's liner product(s).
3. Documentation that Contractor's superintendent(s) designated for this project has at least five (5) years of continuous active experience in the commercial installation of CIPP.
4. The Contractor shall submit a work plan to the Owner and/or Engineer for approval. The work plans shall detail the preparation steps required for pre-installation (including methodology for point repairs), by-pass of existing flow, confined space entry procedure, traffic control, public notification procedure, and the procedures and steps to be followed for the installation.
5. The Contractor shall provide certification documentation for all technicians on the project who are performing pre- installation and post-installation CCTV inspections. These technicians shall hold National Association of Sewer Service Companies (NASSCO) certification for NASSCO's Pipeline Assessment and Certification Program (PACP).
6. The Contractor shall submit to the Owner and/or Engineer the pipe diameter, length and CIPP wall thickness for the sewer to be lined. A certificate sealed by an insured registered Professional Engineer in the State of Missouri shall be submitted stating the design meets the performance and requirements of this specification
7. The Contractor shall submit to the Owner and/or Engineer for approval, the standard curing temperature/pressure/cool-down schedules prior to construction.
8. The Contractor shall submit to the Owner and/or Engineer two electronic copies of all pre-and post-CCTV inspection video images and inspection logs for review and permanent record and for acceptance of work prior to final payment.
9. Contractor shall submit process control sheet including temperature/time log information and curing cycle, Vendor certification of proper installation, and certified copies of test reports on CIPP coupons obtained during actual installation.

1.6. SAFETY REQUIREMENTS

A. The Contractor shall complete all work in strict accordance with all applicable current OSHA, federal and state standards and requirements. Particular attention is drawn to those safety requirements involving work on an elevated platform and entry into a confined space. It shall be the responsibility of the Contractor to comply with OSHA standards and regulations pertaining to all aspects or the work.

1.7. QUALIFICATIONS

A. Products and Installers must meet all of the following criteria:

1. Installer must have been in the CIPP business for at least two (2) years. In addition, the Installer much have successfully installed at least 500,000 feet of the product bid in wastewater collection systems. The Installer's onsite superintendents designated for this project must have had at least five (5) years of continuous active experience in the installation of CIPP, and have been employed by the installer for no less than the past twelve (12) months. Acceptable documentation of these minimum installation must be submitted to the Owner and/or Engineer.
2. Financial Means and Related Experience - For an Installer (Contractor) to be considered Commercially Proven, the Installer must satisfy all insurance, financial, and bonding requirements of the Owner
3. Liner Manufacturer: Company specializing in manufacturing the Products specified in this section shall have current ISO-9001 certification.

PART 2: PRODUCTS

2.1. GENERAL

A. This section governs materials that may be required to complete pipe installation by trenchless pipe replacement methods as shown on the Drawings and/or as provided for in the Specifications.

2.2. MATERIALS

A. Tube: The Tube shall consist of one or more layers of absorbent non-woven or needled felt fabric and meet the requirements of ASTM F1216, Section 5.1. The tube shall be constructed to withstand installation pressures and temperatures, be compatible with the resin system used, have sufficient strength to bridge missing pipe, and stretch to fit irregular pipe sections.

B. The wet out Tube shall have a relatively uniform thickness that when compressed at installation pressures will equal or exceed the calculated minimum design thickness.

C. The Tube shall be manufactured to a size that when installed will tightly fit the internal circumference and length of the original pipe. Allowance should be made for circumferential stretching during inversion. Overlapped layers of felt in longitudinal seams that cause lumps in the final product shall not be utilized.

D. The outside layer of the Tube shall be coated with an impermeable, flexible membrane that will contain the resin and will facilitate monitoring the resin impregnation (wet out) process and post-installation inspection.

E. The Tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material shall be included in the Tube that may cause delamination in the cured CIPP. No dry or unsaturated layers shall be evident.

F. The wall color of the interior pipe surface of CIPP after installation shall be a relatively light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made.

G. Seams in the Tube shall be as strong as or stronger than the non-seamed felt material.

H. The Tube shall be marked for distance at regular intervals along its entire length, not to exceed 10 ft. Such markings shall include the Manufacturer's name or identifying symbol.

I. Resin: The resin system shall be a corrosion resistant polyester, epoxy vinyl ester, or epoxy system including all required catalysts, initiators or hardeners that when cured within the tube create a composite that satisfies the requirements of ASTM F1216 and ASTM D5813, the physical properties herein, and those which are to be utilized in the design of the CIPP for this project. The resin shall produce a CIPP that will comply with the structural and chemical resistance requirements of this specification.

2.3. STRUCTURAL REQUIREMENTS

A. The CIPP shall be designed as per ASTM F1216, Appendix X1. The CIPP design shall assume no bonding to the original pipe wall. Owner and/or Engineer will determine the design condition of the pipes for this project. These calculations will define the required pipe wall thickness and are contained within the ASTM F1216 Appendix X1. Under no circumstances shall the CIPP liner be less than 6 mm.

B. The Contractor must have performed long-term testing for flexural creep of the CIPP pipe material installed by his Company. Such testing results shall be used to determine the long-term, time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (Tube and Resin) and general workmanship of the installation and curing. A percentage of the instantaneous flexural modulus value (as measured by ASTM D790 testing) will be used in design calculations for external buckling. The percentage, or the long-term creep retention value utilized, will be verified by this testing. Retention values exceeding 50% of the short-term test results shall not be used. The materials utilized for the contracted project shall be of a quality equal to or better than the materials used in the long-term test with respect to the initial flexural modulus used in the CIPP design.

C. The layers of the cured CIPP shall be uniformly bonded. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers. If the layers separate during field sample testing, new samples will be required to be obtained from the installed pipe. Any reoccurrence may cause rejection of the work.

D. The cured pipe material (CIPP) shall conform to the structural properties, as listed below.

MINIMUM CIPP PHYSICAL PROPERTIES		
Property	Test Method	Minimum Value
Flexural Modulus of Elasticity	ASTM D790	400,000 psi
Flexural Strength	ASTM D790	4,500 psi

E. The required structural CIPP wall thickness shall be based as a minimum, on the physical properties in paragraph 2.3.D above and in accordance with the most conservative results from the design equations in ASTM F1216 Appendix X1, and never less than 6 mm. The calculated design wall thickness shall be expressed as an even multiple of 1.5 mm. Design Considerations of ASTM F1216 for fully deteriorated conditions, and the following design parameters:

PARAMETER	VALUE
Design Safety Factor	2.0

Retention Factor for Long-Term Flexural Modulus	As determined by long-term tests described in paragraph 2.1.B. above, not to exceed 50%, and approved by Owner and/or Engineer
Ovality	Calculated from S1.1 of ASTM F1216, and being not less than 2%
Groundwater Depth (above invert of existing pipe)	Five (5) feet below the top of ground
Soil Depth (above crown of existing pipe)	10'-0" or per actual site conditions, whichever is greater
Soil Modulus	700 psi
Soil Density	120 lb per cubic feet
Live Load	AASHTO H20, except for railroad crossings

F. Any layers of the tube that are not saturated with resin prior to insertion into the existing pipe shall not be included in the structural CIPP wall thickness computation.

2.4. TESTING REQUIREMENTS

A. Chemical Resistance: The CIPP shall meet the chemical resistance requirements of ASTM F1216, Appendix X2. CIPP samples for testing shall be of tube and resin system similar to that proposed for actual construction. It is required that CIPP samples with and without plastic coating meet these chemical-testing requirements.

B. Hydraulic Capacity: Overall, the hydraulic cross-section shall be maintained as large as possible. The CIPP shall have a minimum of the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using a commonly accepted roughness coefficient for the existing pipe material taking into consideration its age and condition.

C. CIPP Field Samples: When requested by Owner, the Contractor shall submit test results from field installations of the same resin system and tube materials as proposed for the actual installation. These test results must verify that the CIPP physical properties specified in ASTM F1216, Section 8 and have been achieved in previous field applications. Samples for this project shall be made and tested as described in paragraph 3.14 below of this specification section.

PART 3: EXECUTION

3.1. GENERAL

A. The Contractor shall locate all manhole access points required for executing the work. Owner will provide rights-of-access to these locations. If a street must be closed to traffic because of the orientation of the sewer, the Contractor shall institute the actions necessary to provide access and traffic control. Contractor shall notify the Owner with traffic control plan prior to closing or directing traffic. The Contractor shall supply water and electricity as necessary for cleaning, lining, and other work items.

B. The Contractor shall make all necessary measurements in the field to ensure precise fit of the items in accordance with the plans. In the event of a discrepancy, the Contractor shall immediately notify the Engineer. The Contractor shall not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

C. Each pipe liner shall be subject to inspection by the Engineer immediately before it is installed. Defective liner or undersized thickness liner will be rejected for use of the project.

3.2. CLEANING OF SEWER LINES

A. The Contractor shall remove all internal debris and deposits out of the sewer line that will interfere with the installation of CIPP using accepted sewer cleaning techniques. The Contractor shall dispose of all debris removed from the sewers during the cleaning operation. Any hazardous waste material encountered during this project will be considered as a changed condition and Owner and/or Engineer must be notified before any actions are taken to remove or dispose of hazardous waste.

3.3. BYPASSING SEWAGE

A. The Contractor, when required, shall provide for the flow of sewage around the section or sections of pipe designated for repair. Plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole or adjacent system shall make the bypass.

3.4. INSPECTION OF PIPELINES

A. Inspection of pipelines shall be performed by experienced personnel trained in locating breaks, obstacles and service connections using close circuit television (CCTV) PACP certified inspection techniques. All Pre Liner & Post Liner CCTV shall be PACP rated. The pipeline interior shall be carefully inspected to determine the location of any conditions that may prevent proper installation of CIPP. These shall be noted and corrected. The video images shall be recorded electronically and provided to Owner and/or Engineer.

3.5. LINE OBSTRUCTIONS

A. It shall be the responsibility of the Contractor to clear the line of obstructions such as solids and roots that will prevent the insertion of CIPP. If pre-installation inspection reveals an obstruction such as a protruding service connection, dropped joint, or a collapse that will prevent the installation process, that was not evident on the pre-bid video and it cannot be removed by conventional sewer cleaning equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner's representative prior to the commencement of the work and shall be considered as a separate pay item.

3.6. PUBLIC NOTIFICATION

A. The Contractor shall make every effort to maintain sewer service usage throughout the duration of the project. In the event that a connection will be out of service, the longest period of no service shall be eight (8) hours. A public notification program shall be implemented, and shall as a minimum, require the Contractor to be responsible for contacting each home or business connected to the sanitary sewer and informing them of the work to be conducted, and when the sewer will be off-line. The Contractor shall also provide the following:

1. A. Written notice to be delivered to each home or business three days prior to the beginning of work being conducted on the section, and a local telephone number of the Contractor they can call to discuss the project or any potential problems.

2. Personal contact must be conducted with any home or business which cannot be reconnected within the time stated in the written notice.

3.7. SERVICE CONNECTIONS

A. The Contractor shall be responsible for confirming the locations of all active branch service connections prior to installing the CIPP. The Contractor or lining installer shall apply experienced judgment and coordinate with the Owner to determine whether or not a service line is active. If approved by the Owner, the Contractor will dye test the approved service lines in advance of lining the segment. The Contractor shall provide a clear record of all service connections that are re-installed after lining the pipe.

B. Refer to Specification 02953 - Cured In Place (CIPP) Service Lateral Liner for all other required guidance regarding service connections.

3.8. HANDLING

A. The Manufacturer and Contractor shall use equipment and methods adequate to protect the pipe, joint elements and prevent shock contact of adjacent units during moving or storage. Damaged sections that cause reasonable doubt as to their structural strength or water-tightness will be rejected.

3.9. DELIVERY, STORAGE, AND HANDLING

A. Contractor shall be responsible for the delivery, storage, and handling of all products provided for the execution of the project. No products shall be shipped to the job site without the approval of Owner.

B. Contractor shall keep all products secure and safe from damage and/or injury to others.

3.10. QUALITY ASSURANCE

A. Integrity – Contractor shall fabricate finished liner from materials which, when cured, will provide chemical resistance to internal exposure of domestic sewage, prevent infiltration and exfiltration, and support all external hydraulic, soil, and live loads acting on the original pipe or conduit.

B. Appearance – Liner(s) shall be continuous over the entire length of the insertion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes, wrinkles and delamination.

C. Warranty – The finished CIPP product shall be warranted by Contractor for a period of at least five (5) years from the date of acceptance to be free from any defects. Any defects discovered within the warranty period shall be repaired at Contractor's expense in a manner mutually agreed upon with Owner.

3.11. INSTALLATION

A. The Contractor shall allow Owner to inspect the materials and "wet out" procedure. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to the inside of the lined pipe. CIPP installation shall be in accordance with ASTM F1216, Section 7.

1. Resin Impregnation: The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the loss of resin during installation through cracks and irregularities in the original pipe wall.
2. If a vacuum impregnation process is used, the point of vacuum shall be no further than 25-feet from the point of initial resin introduction. After vacuum in the tube is established, a vacuum point shall be no further than 75-feet from the leading edge of the resin. The leading edge of the resin slug shall be as near to perpendicular to the longitudinal axis of the tube as possible. A roller system shall be used to uniformly distribute the resin throughout the tube. If the Installer uses an alternate method of resin impregnation, the method must produce the equivalent results. Any alternate resin impregnation method must be documented to Owner's satisfaction that the saturation of the CIPP is sufficient.
3. Tube Insertion: The wet out tube shall be positioned in the pipeline using water or steam inversion only. The tube should be inverted through an existing manhole or approved access point and fully extended to the next designated manhole or termination point. Pull-in type methods of tube insertion are not allowed.
4. Temperature gauges shall be placed between the tube and the host pipe's invert position to monitor the temperatures during the cure cycle.
5. Curing shall be accomplished by utilizing hot water under hydrostatic pressure or steam pressure in accordance with the manufacturer's recommended cure schedule.
6. The Contractor shall cool the hardened pipe to a temperature below 100 degrees Fahrenheit (or as recommended by the manufacturer), before relieving the water column. Cool water may be added to the column while draining hot water from a small hole at the opposite end of the CIPP, so that a constant water column height is maintained until cool-down is completed. Care shall be taken in the release of the water column so that a vacuum will not be developed that could damage the newly installed liner.
7. The finished CIPP shall be continuous over the entire length from manhole to manhole and be free from visual defects such as foreign inclusions, dry spots, keel, boat hull, pinholes, wrinkles and other deformities. Any defects, which will affect the integrity or strength of the pipeliner, discovered in the post-installation inspection and during the warranty period shall be repaired at the Contractor's expense.
8. The CIPP shall make a tight fitting seal with the existing pipe(s) in the manhole. One-half inch (1/2") diameter activated oakum band soaked in Scotch Seal 5600 or equal shall be applied circumferentially near the annular space touching the end of the existing pipe and properly encased with a cement based mortar. The top half of the pipeliner shall be neatly cut off at least two inches (2") away from the walls. Breaking or shearing of the pipeliner will not be allowed. The channel in the manhole shall be a smooth continuation of the pipe(s) and shall be merged with other lines or channels, if any. The sides of the channels shall be built up with mortar/concrete to provide benches at a maximum of 1 in 12 pitch towards the channel.

3.12. END SEALS

A. All CIPP mains shall have compression seal gaskets installed at the manhole penetrations.

3.13. LINER TRIMMING

A. After the liner has been cured, the liner should be trimmed entering and exiting the manhole, so that it is nearly flush with the manhole wall. For each inversion of two (2) or more line segments using a single liner, the liner should be cut flush with the trough at the intermediate manhole(s). If additional line segments enter these intermediate manhole(s), the liner should not obstruct the flow from these lines.

3.14. REINSTATEMENT OF BRANCH CONNECTIONS

A. It is the intent of these specifications that branch connections to buildings be re-opened without excavation, utilizing a remotely controlled cutting device, monitored by a CCTV. The Contractor shall certify a minimum of two complete functional cutters plus key spare components are on the job site before each installation or are in the immediate area of the jobsite and can be quickly obtained. Unless otherwise directed by Owner or his authorized representative, all laterals will be reinstated to not less than 90 percent capacity. No additional payment will be made for excavations for the purpose of reopening connections. The Contractor will be responsible for all costs and liability associated with such excavation and restoration work. Laterals shall be re-instated within one eight (8) hour period and by 5:00 pm, unless prior authorization from Owner is obtained and written notification to the property owner is provided and acknowledgment from the property owner is received. Any damage or delays associated with a service lateral will warrant notification to the Owner and the property owner.

3.15. INSPECTION

A. CIPP samples shall be prepared and physical properties tested in accordance with ASTM F1216. The flexural properties must meet or exceed the values listed in paragraph 2.02.D above.

B. Wall thickness of samples shall be determined as described in Section 8 of ASTM F1216. The minimum wall thickness at any point shall not be less than the minimum design wall thickness as calculated in ASTM F1216. Under no conditions shall the thickness of the CIPP liner be less than 6 mm.

C. Visual inspection of the CIPP shall be in accordance with ASTM F1216, Section 8.7

3.16. TELEVISION INSPECTION OF GRAVITY SEWER 8-INCH IN DIA. AND LARGER

A. High quality project video recording of internal conditions of gravity sewer 6-inch in diameter and larger shall be created after construction is complete.

3.17. CLEAN-UP

A. Following completion of the CIPP work at each project area, Contractor shall remove rubbish, debris, dirt, equipment and excess material from the site. Contractor shall also clean and restore adjacent surfaces soiled by and during the course of the CIPP work, including returning disturbed ground cover to appropriate grade. All excess material and debris not incorporated into the permanent installation shall be disposed of by Contractor at his expense.

3.18. ACCEPTANCE

A. Perform post-construction CCTV inspection after installation of the liner. Provide inspection data to Owner and/or Engineer.

B. Liner failure is defined as blistering, cracking, embrittlement, softening and connection sealing failure.

C. After the work is completed, the Contractor shall provide the Owner and/or Engineer with a video recording showing both the before-lined and after-lined conditions, including the restored connections.

D. There shall be no holes, dry spots, lifts, ribs, wrinkles, blisters, ridges, splits, bulges, cracks, delaminations or other type defects in the CIPP lining. In addition, there shall be no groundwater leakage through the CIPP or between the liner and the existing pipes including at the connections to manholes. Defective lining and groundwater leakage shall be repaired in a manner suitable to and approved by the City at no additional cost to the Owner.

E. The City's decision on how to correct the defective lining shall be final. Options for repairing defective lining that will be considered by the City include removing the liner and re-lining the sewer, excavating and replacing the sewer from manhole to manhole, pipe bursting the sewer from manhole to manhole or re-lining the sewer completely from manhole to manhole.

F. Defective Work Procedure – Within ninety (90) days of the final delivery of written reports and video files, Engineer will notify Contractor in writing of any defective work. Defective work (if any) will be corrected by Contractor within sixty (60) days of receipt of this written notification. These corrections will be made to the satisfaction of Owner and Engineer at no additional cost to Owner.

3.19. WARRANTY

A. All liner installations shall be warranted to be free from defects in material and workmanship for a period of five (5) years from the date of project acceptance. Should a defect occur during this five (5) year period that is attributable to the liner installation or materials, then this defect shall be repaired within four (4) weeks from the date of defect notification to the Contractor at no additional cost to the Owner. However, if a liner is causing loss of flow or causing a backup the contractor will repair within 24 hours. The Contractor shall be responsible for all required repair costs associated with a liner failure during the warranty period including all costs associated with lateral backups into buildings and all other property damage.

END OF SECTION 02952

SECTION 02953 - CURED-IN-PLACE PIPE (CIPP) SERVICE LATERAL LINER

PART 1: GENERAL

1.1. WORK INCLUDED IN THIS SECTION

A. This section covers the materials, labor and equipment required for the rehabilitation of sanitary sewer service connections by installation of a resin-impregnated flexible tube. The tube shall be inverted and inflated to conform to the circumference/profile of the host pipe. The resin is cured by manufacturer's recommendation. When cured, the tube shall be hard, strong, and chemically inert, continuous and jointless to the main line connection.

B. The Contractor shall take measurements in the field to properly size the liner and shall verify the length of the pipe prior to ordering the liner.

C. The Contractor shall verify all active laterals to be rehabilitated.

1.2. SPECIFICATION MODIFICATIONS

A. It is understood that throughout this section these Specifications may be modified by appropriate items in the notes on the Contract Drawings.

1.3. REVISIONS OF STANDARDS

A. When reference is made to a Standard Specification i.e. ASTM, ANSI, AWWA, MCIB, the specification referred to shall be understood to mean the latest revision of said specification as amended at the time of the Notice to Bidders, except as noted on the Drawings.

1.4. SUBMITTALS

A. The Contractor shall provide certifications or shop drawings on all materials provided under these specifications in accordance with the Submittals section of the project specifications. The Contractor shall submit the following to the Owner and/or Engineer prior to actual work:

1. Calculations, technical data, and complete physical properties of the liner and dimensions pertinent to the job.
2. The Contractor shall submit a work plan to the Owner and/or Engineer for approval. The work plans shall detail the preparation steps required for pre-installation (including methodology for point repairs), by-pass of existing flow, and the procedures and steps to be followed for the installation.
3. The Contractor shall submit to the Owner and/or Engineer for approval, the standard curing temperature/pressure/cool-down schedules prior to construction.
4. The Contractor shall submit to the Owner and/or Engineer two electronic copies of all pre-and post-CCTV inspection videos and inspection logs for review and permanent record and for acceptance of work prior to final payment.

5. The Contractor shall submit to the Owner and/or Engineer the pipe diameter, length and CIPP wall thickness for the sewer to be lined. A certificate sealed by an insured registered Professional Engineer in the State of Missouri shall be submitted stating the design meets the performance and requirements of this specification.

1.5. PACKAGING, HANDLING, SHIPPING AND STORAGE

A. Packaging, handling, shipping and storage shall be performed in accordance with the manufacturer's instructions.

B. On site storage locations shall be approved by the Owner.

1.6. REFERENCED DOCUMENTS

A. This specification referenced standards from the American Society for Testing and Materials which are made a part hereof by such reference and shall be the latest edition and revision thereof. In case of conflicting requirements between this specification and these referenced documents, this specification will govern.

B. The following standard specifications are referenced:

1. ASTM D790 - Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
2. ASTM D903 – Test Method for Peel or Stripping Strength of Adhesive Bonds.
3. ASTM D2990 – Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics
4. ASTM D5813 - Standard Specification for Cured-in-Place Thermosetting Resin Sewer Pipe
5. ASTM F1216 - Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube.
6. ASTM F2561-11 – Standard Practice for Rehabilitation of Sewer Service Lateral Using a One-Piece Main and Lateral Cured in Place Liner.

1.7. QUALIFICATIONS

A. Products and Installers must meet all of the following criteria:

1. Installer must have been in the CIPP business for at least two (2) years. The Installer's onsite superintendents designated for this project must have had at least five (5) years of continuous active experience in the installation of CIPP and CIPP service lateral connections, and have been employed by the installer for no less than the past twelve (12) months. Acceptable documentation of these minimum installation requirements must be submitted to the Owner and/or Engineer.
2. Sewer rehabilitation products submitted for approval must provide third party test results supporting the structural performance (short-term and long-term) of the product and such data shall be satisfactory to Owner and/or Engineer. Test samples shall be prepared so as to simulate installation methods and trauma of the product. No product will be approved without verification.

3. There must be documented quality control and assurance program in place for the engineering applications, manufacturing, and installation. Upon request, the Contractor shall provide the documentation and verifying this requirement to Owner and/or Engineer. The tube and resin manufacturing and process shall operate under a quality management system which is third party certified to ISO 9001.
4. Contractor must verify that a 24-hour response time can be met in correcting emergency repairs.

1.8. CURED IN PLACE PIPE (CIPP) SERVICE LATERAL TO MAIN CONNECTION

A. Lateral connection with one-piece full wrap (FW) CIPP Liner:

1. The finished liner shall have a one-piece 360 degrees full wrap main line CIPP liner with an integral lateral connection CIPP liner that extends into the lateral a minimum of 18 inches.
2. Full wrap rehabilitation may only be utilized when the main pipe is between 8 and 18 inches in diameter.
3. Full wrap rehabilitation shall not be used on 6-inch main pipe, or pipes 18 inches and larger.

PART 2: PRODUCTS

2.1. GENERAL

A. This section governs materials that may be required to complete pipe installation by trenchless pipe replacement methods as shown on the Drawings and/or as provided for in the Specifications.

B. The CIP lateral and lateral to main connection liner repair system shall be "T-Liner" as manufactured by LMK Enterprise, Inc., or Engineer approved equal. These systems should conform to the following structural properties

PROPERTY	TEST METHOD	CURED COMPOSITE PER ASTM F1216	RESIN PROPERTIES
Flexural Modulus of Elasticity (Short-Term)	ASTM D790	250,000 psi	400,000 psi
Flexural Strength (Short-Term)	ASTM D790	4,500 psi	4,500 psi

C. The service lateral connection repair shall include a minimum 16-inch length CIPP repair covering 360 degrees of the mainline sewer with integral CIP lateral liner.

D. The one-piece full wrap lateral connection CIP shall extend into the lateral a minimum of 18 inches

E. The rehabilitation shall be accomplished using a non-woven textile tube of adequate length and thermo-setting resin with physical and chemical properties appropriate for the application.

2.2. MATERIALS

A. The liner shall be continuous in length and consist of one or more layers of absorbable textile material and meet the requirements of ASTM F1216 and ASTM D5813 Sections 6 and 8.

B. The interior of the textile sheet shall be coated with an impermeable, translucent, flexible membrane.

C. The mainsheet and lateral tube shall be a one-piece assembly formed in the shape of a "T" or Wye. No intermediate or encapsulated elastomeric layers shall be in the textile that may cause delamination.

D. Gasket Seals:

1. The mainline tube shall include a compression gasket seal attached to the main liner tube at the connection or four molded hydrophilic O-rings at the mainline termination ends.

2. The compression gasket seals shall be a minimum of 2.5 mm thick and shall conform to ASTM F3240.

3. The lateral tube shall include two compression molded O-ring gaskets attached six inches from the terminating end of the lateral tube.

4. A liquid sealant, adhesives or other fluid like materials have paste like consistency will not be accepted.

E. Resin System:

1. The resin/liner system shall conform to ASTM D5813 Section 8.2.2-10,000 HR test.

2. The resin shall be corrosion resistant polyester, vinyl ester, epoxy or silicate resin and catalyst system that when properly cured within the composite liner assembly, meets the requirements of ASTM 1216.

PART 3: EXECUTION

3.1. CLEANING OF SEWER SERVICE LATERALS AND MAIN PIPE AT CONNECTIONS

A. The Contractor shall remove all internal debris and deposits out of the service lateral and main sewer that will interfere with the installation of liner. Contractor is responsible for properly dumping debris pulled from service lateral cleaning.

B. Cleaning shall be in accordance with NASSCO standards and the liner manufacturer's requirements.

C. The Contractor shall dispose of all debris removed from the service laterals during the cleaning operation. Any hazardous waste material encountered during this project will be considered as a changed condition and Owner and/or Engineer must be notified before any actions are taken to remove or dispose of hazardous waste.

3.2. INSPECTION OF SERVICE LATERALS

A. Inspection of service laterals shall be performed by experienced personnel trained in using close circuit television (CCTV) LACP certified inspection techniques. All Pre Liner & Post Liner CCTV shall be LACP rated. The service lateral interior shall be carefully inspected to determine the location of any conditions that may prevent proper installation of CIPP lateral liner. These shall be noted and corrected. The videos shall be recorded electronically and provided to Owner and/or Engineer.

3.3. LATERAL OBSTRUCTIONS

A. It shall be the responsibility of the Contractor to clear the line of obstructions such as solids and roots that will prevent the insertion of the CIPP lateral liner. If pre-installation inspection reveals an obstruction such as a dropped joint or a collapse that will prevent the installation process, that was not evident on the pre-bid video and it cannot be removed by conventional sewer cleaning equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner's representative prior to the commencement of the work and shall be considered as a separate pay item.

3.4. PUBLIC NOTIFICATION

A. The existing service lateral must be taken out of service during the time of installation. The Contractor shall provide a minimum of 48 hours notice to the property owner prior to the work and coordinate the timing for discontinuation of service.

1. After hours work may be required for commercial properties.
2. No service outage shall be greater than 8 hours.

B. The public information and notification shall require Contractor to be responsible for contacting 48 hours in advance, each home or business connected to the sanitary sewer and informing them of the work to be done and when the sewer will be offline by the following:

1. A. Written notice to be delivered to each home or business describing work, scheduled, how it affects them and a local telephone number of Contractor they can call to discuss the project or problems.
2. Personal contact on the day of pre-installation inspection of the sewer. Each lateral shall be verified by having the homeowner run water down their drain. If the homeowner is unavailable, other arrangements shall be made to flow water through the lateral.
3. Personal contact and written notice the day prior to beginning work on the section of sewer to which they are connected.
4. Personal contact with any home or business which cannot be reconnected within the time stated in the written notice.

3.5. SERVICE CONNECTION REINSTATEMENT

A. Restoration of sewer service shall provide a full diameter hole, free from burrs or projections and finished with a smooth, brushed and buffed crack free edge. The hole shall match the original sewer service pipe diameter and location.

B. Contractor shall be responsible for confirming the locations of all active branch service connections prior to installing the CIPP. The Contractor or lining installer shall apply experienced judgment and coordinate with Owner to determine whether or not a service line is active. If approved by Owner, Contractor will dye test the approved service lines in advance of lining the segment. The Contractor shall provide a clear record of all service connections that are re-installed after lining the pipe.

C. Contractor and subcontractor responsible for lateral re-instatement shall maintain lateral reinstatement tools locally during the duration of the main line CIPP work.

3.6. YARD PROTECTIVE MEASURES

A. The Contractor shall provide protective measures (felt, blocks of wood, plywood, cardboard, concrete blocks, street plates, etc.) to create a barrier between the boiler/steam hoses and grass for each installation.

B. The surface shall be restored to original or better condition.

3.7. INSTALLATION

A. Lateral connection with one-piece full wrap CIPP liner:

1. All service lateral connections identified to be repaired shall be fitted with a lateral CIPP full wrap Owner and/or Engineer and Contractor shall jointly review the Contractor's CCTV to identify specific lateral service connections that cannot be repaired using a CIPP full wrap.
2. If it is determined an open cut repair is required, such excavation shall be approved by Owner and/or Engineer prior to commencement of the work.
3. The lateral tube shall be sized according to the pipe diameter and condition. Changes in size shall be accommodated.
4. The lateral tube and mainline sheet shall be installed in accordance with the manufacturer's procedure:
    a. The system shall be encapsulated within the translucent bladder and vacuum impregnated with resin under controlled conditions or a spatula may be used to distribute the resin.
    b. The volume of resin used shall be sufficient to fill all voids in the textile lining material at nominal thickness and diameter.
    c. No dry or unsaturated area in the mainline sheet or lateral tube shall be acceptable upon visual inspection.
5. The main bladder shall be inflated and expand the lateral tube to be inserted into the lateral pipe:
    a. Pressure is maintained throughout the curing period.
    b. The liner shall be cured by an approved heat source to reduce the time required for curing.
    c. The equipment shall be capable of delivering a mixture of stream and air throughout the liner bladder assembly to uniformly raise the temperature above the temperature required to cure the resin.

d. The heat source temperatures shall be monitored and logged during the curing and cool down cycle.

6. The finished CIPP shall be continuous over the service connection and 16 inches of the main pipe:

   a. The CIPP shall be smooth and shall be free of dry spots, lifts, and delaminated portions.

   b. The CIPP shall taper at each end providing a smooth transition.

   c. The finished product shall be airtight and watertight connection between the main sewer and lateral.

3.8. ACCEPTANCE

A. Perform post-construction CCTV inspection after installation of the connection liners. Provide inspection data to Owner and/or Engineer.

B. Liner failure is defined as blistering, cracking, embrittlement, softening and connection sealing failure.

C. After the work in completed, the Contractor shall provide Owner and/or Engineer with electronic video recordings showing both the before-lined conditions and after-lined full length conditions of the repaired laterals.

D. There shall be no holes, dry spots, lifts, ribs, wrinkles, blisters, ridges, splits, bulges, cracks, delaminations or other type defects in the CIPP lining. In addition, there shall be no groundwater leakage through the CIPP or between the liner and the existing pipes. Defective lining and groundwater leakage shall be repaired in a manner suitable to and approved by the City at no additional cost to the Owner.

E. The City's decision on how to correct the defective lining shall be final.

F. Defective Work Procedure – Within ninety (90) days of the final delivery of written reports and video files, the Engineer will notify the Contractor of any defective work. Defective work (if any) will be corrected by Contractor within sixty (60) days of receipt of this notification. These corrections will be made to the satisfaction of City and Engineer at no additional cost to the Owner.

3.9. CLEAN-UP

A. Upon acceptance of the installation work and testing, the Contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work.

3.10. WARRANTY

A. All liner installations shall be warranted to be free from defects in material and workmanship for a period of five (5) years from the date of project acceptance. Should a defect occur during this five (5) year period that is attributable to the liner installation or materials, then this defect shall be repaired within four (4) weeks from the date of defect notification to the Contractor at no additional cost to the Owner. However; if a liner is causing loss of flow or causing a backup the contractor will repair within 24 hours. The Contractor shall be responsible for all required repair costs associated with a liner failure during the warranty period including all costs associated with lateral backups into buildings and all other property damage.

END OF SECTION 02953

SECTION 02955 – SEWER CLEANING AND CCTV INSPECTION:

PART 1 GENERAL

1.01 SUMMARY

A. The intent of this work is to remove foreign material(s) from mainline sewers lines and complete a closed circuit television (CCTV) inspection of the lines and facilities included in this project.

1.02 SCOPE OF WORK

A. Sewer Cleaning – The intent of sewer line cleaning is to remove foreign materials from the mainline sewers. This cleaning is also intended to restore the sewer to a minimum of ninety-five percent (95%) of its original carrying capacity**.**

B. CCTV Inspection – After cleaning and removal of debris, the pipe sections between manholes or other structures shall be inspected by means of CCTV equipment.

C. Traffic Control – The Contractor shall be solely responsible for all signage, flagging, cones, personnel and any other item or personnel required for traffic control.

1.03 REFERENCES

A. National Association of Sewer Service Companies (NASSCO), *Jetter Code of Practice*.
B. National Association of Sewer Service Companies (NASSCO*)* prepared*, Pipe Line Assessment and Certification Program (PACP), TV inspection form and sewer condition codes.*

1.04 SUBMITTALS

A. Safety Plan –The Contractor shall provide a safety plan and identify designated safety supervisory personnel to the Engineer. The plan shall include confined space entry provisions and training, listing of personal protective equipment, and a traffic control plan (if applicable).

B CCTV Technician NASSCO PACP Certification – The Contractor shall provide certification documentation for all technicians on the project.

PART 2 EQUIPMENT

2.01 SEWER CLEANING EQUIPMENT

A. Cleaning Equipment – Line cleaning for this work shall be accomplished using equipment suitable to the task.

B. High Velocity Cleaning Equipment – Where high velocity equipment is used, the equipment shall include an assortment of nozzles, milling or other heads, root saws, and other ancillary equipment necessary to accomplish the cleaning portion of the work.
C. Mechanical Cleaning Equipment – Mechanical means for line cleaning may be used with the prior consent of the Engineer.

2.02 CCTV EQUIPMENT

A. Type of Equipment - The CCTV cameras used for inspection shall be specifically designed and constructed for such inspection. The cameras shall be operative in one hundred percent (100%) humidity conditions and capable of withstanding exposure to concentrations of pollutants typically found in municipal sewage.

B. Camera View - The view seen by the camera shall be transmitted to a monitor of greater than or equal to (≥) fifteen inches (15") diagonal dimension.

C. Camera Movement - Camera systems shall be able to navigate minor objects, roots, and debris. The system used to move the camera through the pipe shall not obstruct the camera's view or interfere with proper documentation of the sewer conditions. The camera shall be capable of traversing the sewer line for a distance of at least one thousand feet (1,000'). The camera shall have sufficient clearance to allow for the assembly to pass through sewer lines of nominal diameter six inches (6") and larger.

D. Camera Accessories - The Contractor shall provide ancillary wheels, crawlers, tracks, or other adjustment plates, skids, arms, axles, etc. as may be necessary or dictated by flow conditions, pipe diameter, etc. These accessories shall be utilized to stabilize the camera in the pipeline, provide adequate propulsion in the pipeline for the camera, and/or to raise the camera above flow to provide a quality picture during CCTV inspection.
E. Camera Features – Cameras shall record all images in color. Cameras shall have pan and tilt capabilities, and shall have a minimum of three hundred sixty degree by one hundred eighty degree (360º x 180º) rotation capability. Illumination sensitivity shall be three (3) lux or less and provide a minimum of four hundred sixty (460) lines of resolution. The focal distance shall be adjustable through range from one inch (1") to infinity. There shall be no geometric distortion of the image.

F. Supplemental Lighting and Lighting Adjustments - Cameras shall also be provided with ancillary or supplemental lighting packs or units to provide sufficient light and illumination in larger diameter conduits or conduits where additional lighting may be necessary (e.g. HDPE pipe). Lighting intensity shall be adjustable to minimize glare. Lighting and picture quality shall be adjustable to provide a clear picture of the entire periphery of the pipeline for all conditions encountered.

G. Measurement of Distance - The distances traveled by the camera shall be measurable to one tenth of a foot (.1') by an onboard measuring device and shall provide video display readout of said distances in units of one tenth of a foot (.1'). The cable footage counter shall

be accurate to plus or minus (+/-) one foot (1') per one hundred feet (100').

PART 3 EXECUTION

1.01 SEWER CLEANING

A. Protection of Public and Private Property – During sewer cleaning operations, precautions shall be taken to prevent damage to public or private property. Any cleanup and associated costs caused by the Contractor's actions shall be the Contractor's responsibility to remedy.

B. Water Supply for Jetting – Water required for jetting and cleaning shall be furnished by the Owner. The Engineer or Owner shall identify to the Contractor acceptable hydrants or other water supply points that shall be used during the project.

C. Pipe Cleaning – High velocity pipe cleaning shall begin at the downstream manhole of a pipe segment and proceed upstream to the next inline manhole. The jetter hose and affixed tool (nozzle, root saw, etc.), shall proceed against the flow (i.e. upstream) to the next structure in line (i.e. the upstream manhole) if possible. The Contractor shall dewater and remove all sludge, dirt, sand, rocks, grease, and other solid or semisolid material and debris resulting from the cleaning operations from the downstream manhole of the sewer segment being cleaned. Passing material from sewer segment to sewer segment (without the debris being ultimately removed from the pipeline) shall not be permitted. The Owner shall provide a dump site for waste material removed from the various pipelines at no charge to the Contractor. The Contractor shall be responsible for the handling, hauling and disposal of all debris, silt, and accumulated solids removed from the sewer to this site(s).

D. Cleaning Pass Defined - For the purposes of this work, a "cleaning pass" in a sewer line shall be defined as one of the following:

1. One complete, unimpeded "round trip" from the downstream manhole to the upstream manhole and return to the downstream point of origin by the jet hose and cleaning tool, A movement by the jet hose and attached tool from the downstream point of origin (manhole or structure) of jetting to a pipe obstruction or blockage that will not allow the jetter hose and attached tool to complete a "round trip" per paragraph (1) above,

E. Light and Heavy Cleaning Defined - For the purposes of this contract light cleaning and heavy cleaning shall be defined as follows:

1. Light cleaning shall be the movement of the sewer jet hose and affixed nozzle or tool upstream for two cleaning passes OR less. During these two or fewer cleaning passes, ninety-five percent (95%) or more of the sewer capacity shall be restored. If this level of capacity cannot be restored after two cleaning passes, then the line segment shall be deemed to require "heavy cleaning" and the Contractor will continue until the line is restored to the desired capacity.

2. Heavy cleaning shall be the movement of a sewer jet hose and affixed nozzle or

tool for more than two cleaning passes to restore the sewer to a minimum of ninety-five percent (95%) capacity.

3. The Contractor shall notify the Engineer when heavy cleaning is required. All printed line segment reports shall contain the words “Heavy Cleaning XXX feet” in a prominent place on the report to denote that the particular line segment(s) required heavy cleaning.

4. Special Circumstances – There may be certain circumstances where the Contractor may discover that: 1) a line segment is completely blocked and the hose and cleaning tool cannot proceed any farther, or 2) a line segment, or part thereof, has deteriorated to a point where further cleaning, removal of root balls, mineral deposits, protruding laterals, or other blockages and debris, may cause damage to the pipe. Should the Contractor identify said “special circumstances”, the Contractor shall safely clean and video inspect as much of the pipeline as possible and then submit all video inspections and reports to the Engineer. The Contractor will be paid for the portion of the sewer line that has been cleaned and inspected to the point of termination.

F. Removal of Roots – Roots shall be removed from the sewer line when:

1. The CCTV camera cannot pass by the root mass and continue down the pipeline for video inspection. All roots shall be cut (with the exception of “fine roots” as defined in PACP) to within one inch (1”) of the pipe wall.

2. Roots shall only be removed by mechanical devices proceeding from the downstream manhole or access point to the root mass. No “reverse cutting” from the upstream manhole or access point will be permitted.
3. All lines that require root cutting will be inspected after root cutting is completed. Televising may be stopped and root cutting executed while the video recording is paused.

G. Removal of Mineral or Attached Deposits – Mineral or other attached deposits (MOAD) shall be removed when:

1. If the CCTV camera cannot pass by the MOAD and continue down the pipeline during video inspection.

2. MOAD shall only be removed by mechanical devices proceeding from the downstream manhole or access point to the root mass. No “reaming” from the upstream manhole or access point will be permitted.

3. All lines that require MOAD removal will be inspected after reaming is completed. Televising may be stopped and deposit removal executed while the video recording is paused.

4. Removal of hardened deposits such as concrete, mortar, or other cementitious type material found attached in the pipeline is beyond the scope of this project. Such material shall be documented and coded during the CCTV inspection as “Other Deposits” using the PACP modifier “DAZ”.

H. Removal of Protruding Taps – Protruding service taps shall be removed from the sewer when:

1. The CCTV camera cannot pass by the protruding tap and continue down the pipeline during video inspection.
2. Protruding taps will be only be removed by the mechanical device proceeding from the downstream manhole or access point to the tap. No “reverse cutting” from the upstream manhole or access point will be permitted.
3. It should be noted that removing protruding taps constructed of polyvinyl chloride (PVC) may result in cracking or other damage to the lateral pipe upstream of the mainline connection. As such, PVC protruding taps are not required to be removed.
4. All lines that require tap cutting will be inspected after tap cutting is completed. Televising may be stopped and tap cutting executed while the video recording is paused.

1.02 CCTV INSPECTION

A. Standards – Video inspection shall be completed per the Pipeline Assessment Certification Program (PACP®) as promulgated by the National Association of Sewer Service Companies (NASSCO).

B. Certified Technicians – Video inspection shall be completed by technician(s) who have been certified by NASSCO as PACP compliant and trained. The technician(s)’ PACP certification number(s) shall be included in all line segment reports as furnished as part of this project.

C. Certified Software – All video inspection and subsequent reports shall be compiled using the latest version of a PACP compliant software package as certified by NASSCO.

D. Video of Line Segments – Each line segment shall be video inspected one at a time. Each segment will have its own video file (with a distinct file name) and corresponding line segment report. This shall apply to lines videoed from the upstream manhole moving to the downstream end and to lines being accessed from the downstream manhole or structure during “reverse setups”.

E. Discovery of Undocumented Structures – When intermediate and undocumented manholes are found, the Contractor shall conclude the video inspection upon reaching the undocumented structure. A video file and printed line segment report shall be generated per usual procedures for this line segment. *It should be noted that the video text overlay that was created at the start of this survey will now be incorrect. This information and display*

cannot be changed within the video file once a line segment report has begun. The electronic file's name shall be changed to reflect the proper and accurate line segment information. The report will indicate the location of the intermediate structure (by its footage upstream/downstream from the point of origin of the survey), its type and corresponding PACP code. A new line segment report will then begin at the intermediate and previously undocumented structure (now named, labeled, and documented) and proceed to the next structure indicated on the project maps, or to the next intermediate and undocumented structure, if any.

F. Locating and Exposing Manholes and Structures – The Engineer or the Owner shall locate and expose all manholes or other structures indicated on the project maps prior to the beginning of the project.

G. Corresponding Data – Each video clip or file and each digital photograph or file shall correspond to inspection data in the database, and each set of inspection data listed in the database shall be properly linked to the appropriate video file or photo(s).

H. Video Inspection Parameters – The following information shall constitute the desired parameters for video inspection for this project:

1. Video Format – The Contractor shall make a continuous color digital recording in Motion Picture Experts Group (MPEG) 1 format.

2. Minimum Resolution – Video files shall have a minimum resolution of six hundred forty by four hundred eighty (640 x 480) pixels and an interlaced frame rate at a minimum of twenty-nine point nine (29.9) frames per second.

3. Video Text Overlay – Each pipe segment video shall begin with a video text overlay (displayed for a minimum of five (5) seconds) and completed in accordance with PACP's CCTV inspection form headers and instructions as follows:

   i. Line 1: Surveyed By
   ii. Line 2: City
   iii. Line 3: Street
   iv. Line 4: Weather
   v. Line 5: Direction of Survey
   vi. Line 6: Use of sewer
   vii. Line 7: Pipe Material
   viii. Line 8: Pipe Diameter/Height
   ix. Line 9: Start Manhole Number
   x. Line 10: End Manhole Number
   xi. Line 11: Inspection Time/Date

4. Text Shown During Video – During the CCTV inspection, the video text overlay shall show the following text at all times:

   a) Start Manhole number
   b) End manhole number

5. Evaluation of Defects and Observations – During the CCTV inspection, the camera shall stop at all defects, observations, and connections to ensure a clear view of the pipe condition and shall rotate the camera head to evaluate the defect, observation, or connection.

6. Text Overlay of Observation – All defects and observations shall include a video text overlay of the appropriate PACP code/description.
7. Naming of Video Files – The naming of the video file shall consist of the following: "UPSTREAM MANHOLE - DOWNSTREAM MANHOLE" as shown in the following example (plus the appropriate file extension). The naming of all video files shall be consistent throughout the project:123-124.mpg

I. Additional Inspection Procedures – Other inspection procedures shall include:

1. Pan of Manholes – All manholes shall be panned. This video footage shall occur at the beginning of each pipe segment survey inspection from the bottom of the manhole panning up to the manhole shaft. In the instance when the manhole is the terminating manhole of a survey, then the pan shall occur at the end of the pipe segment survey.

2. Reverse Setups – Obstructions may be encountered during the course of the CCTV inspection that prevents the travel of the camera. In instances when obstructions are not passable, the Contractor shall withdraw the equipment and begin a CCTV inspection from the opposite end of the sewer line, i.e. a reverse setup. If the video inspection is performed from this reverse setup vantage point, then a new video file shall be created and the name and corresponding header shall contain the word "REVERSE" in the upstream manhole name/label. This video file will be in numerical and chronological order immediately following the original video file. If the line only has one adjoining manhole and a reverse setup is not possible, the televising of the line shall be considered complete, the video inspection shall be abandoned, and the Contractor shall be paid for the footage successfully videoed. If it is determined that a reverse setup is necessary, said setup will be paid for under the pay item "reverse setup".

3. Excessive Depth of Flow or Sags– If, in the course of the video line inspection, pipe flow is in excess of the acceptable PACP standards, the Contractor shall take one of the following actions before completing the video inspection:

    i. Perform the video inspection during times of low flow conditions. If these conditions only exist outside the stated work periods of this project, the Contractor shall seek the Engineer's approval before working during these times, OR

    ii. Work the cleaning nozzle or tool in tandem with the camera. In this instance,

the nozzle will “wick” or draw down the water level in the pipe or sag to allow the camera to pass and make a proper inspection of the footage involved in the sag. Care should be taken by the camera operator and jetter operator to maintain a proper interval between the cleaning tool and the camera. This proper interval will prevent a “back splash” of water or debris on the trailing camera that might otherwise degrade the quality of the video.

1.03 QUALITY CONTROL

A. Review by Engineer and/or Owner - The video recordings, photographs, and data shall be reviewed by Engineer and/or Owner for focus, lighting, clarity of view, and technical quality.

B. Blocked or Distorted Video - Videos recorded while a camera has flipped over in the process of traveling or the viewing of laterals, obstructions, or defects are blocked by cables, skids, or other equipment will not be accepted. Shape, focus, proper lighting, and clear, distortion- free viewing during the camera operations shall be maintained. Failure to maintain these conditions will result in the rejection of the video by the Engineer.

END OF SECTION 02955

SECTION 03050 - MISCELLANEOUS CONCRETE

PART 1: GENERAL

1.1. GENERAL

A. The Contractor shall provide all concrete work as required to complete the concrete construction as specified herein and as shown on the drawings.

1.2. RELATED SECTIONS

A. Section 02205 – Asphaltic Concrete Surface and Base

1.3. REFERENCES

A. ASTM A – 615 Deformed and Plain Billet Steel Bars For Concrete Reinforcement

B. ASTM C - 31 Test Methods of Making and Curing Concrete Test Specimens in the Field

C. ASTM C - 33 Concrete Aggregates

D. ASTM C - 39 Test Method for Compressive Strength of Cylindrical Concrete Specimens

E. ASTM C - 94 Ready-Mixed Concrete

F. ASTM C – 143 Slump of Portland Cement Concrete

G. ASTM C – 150 Portland Cement

H. ACI 304 Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete

I. ACI 305 Committee Report on Hot-Weather Concreting

J. ACI 306 Committee Report on Cold-Weather Concreting

K. ACI 309 Recommended Practice for Consolidation of Concrete

L. ACI 318 Building Code Requirements For Reinforced Concrete

M. ACI 347 Recommended Practice for Concrete Formwork

1.4. SUBMITTALS

A. Contractor shall submit product data for review on the following items required by this Division:

1. Laboratory name
2. Aggregate testing and gradation
3. Design mix

B. Product data shall be submitted in accordance with Section 01202 Submittals.

PART 2: PRODUCTS

2.1. CEMENT

A. Cement shall conform to ASTM C150, Type I, unless high early strength is required in which instance Type III shall be used. Cement may be bagged or bulk. Cements shall be used from only one mill throughout the entire project.

2.2. FINE AGGREGATE

A. Fine aggregate, clean natural sand, shall conform to ASTM C33 and have the following gradation:

Sieve	% Passing	% Retained
3/8"	100	0
#4	95-100	0-5
#8	80-100	0-20
#16	50-85	15-50
#30	25-60	40-75
#50	10-30	70-90
#100	2-10	90-98

2.3. COARSE AGGREGATE

A. Clean crushed rock, washed gravel, or other inert granular material, except that clay and shale particles shall not exceed one percent. Coarse aggregate shall conform to ASTM C33 and have the following gradation:

Sq. Sieve	% Passing	% Retained
3/4"	90-100	0-10
3/8"	20-55	45-80
#4	0-10	90-100
#8	0-5	95-100

2.4. WATER

A. Treated and filtered water from a municipal or other public water supply district shall be used.

2.5. REINFORCING STEEL

A. All bars shall conform to ASTM A615, Grade 60 epoxy coated. Bending details shall conform to ACI 318.

2.6. FORMS

A. The forms shall be true and rigid and conform to shape, line and dimensions as shown on the drawings. All forms shall be rigidly constructed, braced and tied to prevent any deflection or displacement during placing of concrete. All exposed corners and edges shall have 1" fillets. All joints shall be mortar tight; open joints shall be sealed as required.

2.7. CONCRETE MIX

A. Proportioning: Concrete shall conform to the following:

1. Cement: 6 sacks per cubic yard, minimum.
2. Water shall be kept to an absolute minimum to maintain slump as specified.
3. Aggregate: The sand factor shall be as required to give the best workable mix within the range of 46 to 52 percent of total aggregate by weight.
4. Strength: Minimum 4000 psi at 28 days.

B. Slump: The maximum slump shall not exceed 4 inches. Determination of slump shall conform to ASTM C143.

C. Mixing: Contractor shall use ready-mixed concrete, mixed and delivered in conformance with ASTM C94.

D. Admixtures: Air entraining agents shall be added to the concrete to provide 4 to 6 percent entrained air when placed, in conformance with ASTM C185.

PART 3: EXECUTION

3.1. PLACING REINFORCING STEEL

A. All bars are to be accurately placed and securely tied at all intersections.

B. Reinforcing steel shall be free from flaky or scaly rust which will destroy or reduce the bond strength at the time concrete is placed.

C. Unless shown otherwise on the drawings, the following minimum concrete coverage shall be maintained:

1. Against earth: 3 inches
2. Against forms or when exposed to water or weather: 2 inches

3.2. PLACING CONCRETE

A. No concrete shall be deposited below water. The excavation may be damp but shall contain no free water.

B. Concrete shall be conveyed from the mixer to the place of final deposit by methods which will prevent the separation or loss of materials. Retempering of concrete is not permissible.

C. All concrete shall be thoroughly compacted during placement by means of vibrators in conformance with ACI 309.

D. For formed surfaces, the Contractor shall break off ties, grout voids which are deeper than ½" and chip out honeycombed areas to solid concrete and grout flush with formed surface.

E. Curing shall be maintained continuously for seven days after placing concrete or until forms are removed and the surface finished. Concrete surface temperature is to be maintained between 50°F and 100°F for at least seven days.

F. Concrete shall not be placed on iced or frozen subgrade or when the air temperature is below 20°F. Concreting shall not be continued when the air temperature is below 45°F unless the following conditions are attained:

1. Mixing water shall be heated (to a maximum of 150°F).

2. Aggregates shall be heated until free of all ice and frost.
3. The concrete temperature after mixing shall be between 50°F and 70°F if the air temperature is 20°F to 45°F.
4. After the concrete is placed, it shall be covered, protected, and heated so as to maintain a minimum of 70°F air temperature for the 24 hours and 50°F air temperature for the next six days. Open-flame type heaters are not permitted. Heating equipment not vented outside of the covering will not be permitted.
5. Moist conditions shall be maintained during the heating period.
6. All covering, heating equipment, etc., shall be on hand and approved by the Engineer before any concrete is placed.

G. Admixtures, such as calcium chloride, shall not be used.

H. Exposed concrete is not to be placed in air temperatures above 100°F. Cover, protect and cool work as to maintain the temperature of the concrete below 100°F. The concrete temperature, after mixing, shall not be greater than 85°F. Spray and/or shade aggregate piles and cool mixing water as required.

3.3. CONCRETE TEST CYLINDERS

A. All concrete test cylinders shall be provided by the Contractor. The testing of test cylinders, including transportation, shall be paid for by the Contractor.

B. The Contractor shall make at least two test cylinders for each day's pour in excess of 10 cubic yards of each class of concrete, and two test cylinders for each additional 50 cubic yards or major fraction thereof, as directed by the Engineer.

C. The Contractor shall ship the test cylinders to the laboratory on the fourth day, where the laboratory shall proceed to cure until tested. One cylinder shall be tested on the seventh day, and the remaining cylinder shall be tested on the 28th day. The test cylinders shall be identified at the time cast, and as to which pour is represented. Unsatisfactory tests of cylinders shall make the concrete represented subject to rejection, with consequent removal and replacement required.

D. Concrete test cylinders shall be cast and tested in accordance with ASTM C31 and C39. The testing laboratory shall furnish four copies of test reports for test cylinders and distributed as follows:

1. 2 copies – Engineer
2. 2 copies - Contractor

END OF SECTION 03050

SECTION 03200 - CONCRETE REINFORCEMENT

PART 1: GENERAL

1.1. DESCRIPTION:

A. The work of this section consists of furnishing, hauling, and placing all reinforcement materials and all tools, labor, equipment, and incidentals necessary to complete this section.

PART 2: PRODUCTS

2.1. STEEL REINFORCING BARS:

A. Steel reinforcing bars shall conform to ASTM A615, latest revision, "Specification for Deformed Billet-Steel Bars"; ASTM A617, latest revision, "Specification for Axle-Steel Deformed Bars"; or ASTM A616, latest revision, Specification for Deformed Rail-Steel Bars", and shall be Grade 60.

2.2. STEEL REINFORCING WIRE:

A. Steel reinforcing wire shall meet ASTM A82 requirements for cold drawn steel.

2.3. WELDED WIRE FABRIC:

A. Welded wire fabric shall conform to requirements of ASTM A185, "Specification for Welded Steel Wire Fabric" or ASTM A497, "Specification for Welded Deformed Steel Wire Fabric".

2.4. DOWEL BAR INSERTS:

A. Dowel bar splice assemblies may be utilized at the Contractor's option, where required, to eliminate cutting of forms at cantilevered concrete pours, corbels, etc. The inserts shall be of a threaded design, which creates a position locking splice that exceeds the ACI318, latest revision, splice strength requirement of 125 percent of specified yield. Insert shall be Lenton Form Saver by ERICO Products, Richmond DB-SAE system, or approved equal.

2.5. MECHANICAL BUTT SPLICES:

A. Mechanical butt splicing of reinforcing steel may be utilized at the Contractor's option, where reinforcing steel congestion may restrict the flow of concrete aggregate around the steel. The butt splices shall be of a threaded design, which creates a position locking splice that exceeds ACI318, latest revision, splice strength requirement of 125 percent of the specified yield strength of the bar.

PART 3: EXECUTION

3.1. GENERAL:

A. Unless otherwise indicated on the drawings or specified herein, all cutting and bending of reinforcement bars shall be done at the mill or shop prior to shipment. Cutting and bending in the field will be permitted only where shown on the Plans or to correct errors, damage by handling and shipping, and minor omissions in shop bending when authorized by the Engineer.

3.2. STORING AND CLEANING:

A. All reinforcement shall be stored above ground on skids, pallets, or other supports and shall be protected from mechanical injury and from deterioration by exposure. When placed in the work, reinforcement shall be free from dirt, detrimental scale, concrete, paint, oil, or other foreign materials. Tight, thin rust is not considered detrimental and will not require cleaning.

3.3. PLACING:

A. Except as shown on the drawings or specified herein, all placement of reinforcing bars, welded wire fabric and bar supports shall conform to the latest edition of "Placing Reinforcing Bars, CRSI-WCRSI Recommended Practices", published by the Concrete Reinforcing Steel Institute. Bars may be moved as necessary to avoid interference with other reinforcing steel, pipes, or other embedded items. If bars are moved more than the specified placing tolerances, the resulting arrangement shall be subject to approval by the Engineer.

3.4. SPLICES:

A. When splices other than those shown on the Plans become necessary, they shall be located at areas of low stress and shall be subject to approval by the Engineer.

3.5. FABRICATION DRAWINGS:

A. The Contractor shall furnish for Engineer's reference three sets of complete fabrication drawings and details for placing all reinforcing steel. These drawings shall be made in accordance with the accompanying drawings, the applicable portions of the "Building Code Requirements for Reinforced Concrete", (ACI 318-83), the latest edition of the "Manual of Standard Practice for Detailing Reinforced Concrete Structures", (ACI 315), and these specifications. Drawings shall show the clearances, size of members, all dimensions and other details necessary for accurate construction of the concrete work.

END OF SECTION 03200

SECTION 03303 – PORTLAND CEMENT CONCRETE PAVEMENT

PART 1: GENERAL

1.1. SCOPE OF WORK

A. Furnish the necessary equipment, labor and materials required and perform all work in connection with the construction of concrete pavement as shown on the Drawings and as specified at the time of bidding.

1.2. REFERENCE STANDARDS

A. The following standards are referenced directly in this section. The latest version of these standards shall be used.

1. ASTM:
    a. A 185 Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
    b. A 615 Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
    c. D 3405 Standard Specification for Joint Sealants, Hot-Applied, for Concrete and Asphalt Pavements
    d. D 3406 Standard Specification for Joint Sealant, Hot-Applied, Elastomeric-Type, for Portland Cement Concrete Pavements
2. AASHTO:
    a. M 301 Joint Sealants, Hot-Poured, for Concrete and Asphalt Pavements
    b. MCIB
        i. Section 1 Concrete Materials
        ii. Section 2 Outdoor Concrete Exposed to Freezing and Thawing
        iii. Section 3 Concrete Mix Design Tables

PART 2: PRODUCTS

2.1. CONCRETE CONTROL AND QUALITY

A. The current editions of the "Bulletins" and Approved Sections of the "Standard Concrete Specifications" issued by the Mid-West Concrete Industry Board, Inc. (MCIB) are made a part hereof by reference. However, when the provisions of this Specification differ from the provisions of such "Bulletins" and "Sections" the provisions of this Specification shall govern.

2.2. CONCRETE

A. Concrete shall conform to MCIB Section 1 shall be MCIB Mix No. A658-1-2-.365 or No. WA561-1-2- 0.410 or approved equal. All coarse aggregate shall meet the requirements of MCIB section 1 except that it shall meet the following gradation:

Coarse Aggregate Gradation Limits, % Passing
Nominal Maximum Size

Sieve Size	1”	¾”	½”
1½ “	100		
1”	90-97	100	
¾”	62-82	90-97	100
½”	25-60	45-70	80-97
3/8”	16-44	20-55	40-70
No. 4	0-10	0-10	0-15
No. 8	0-5	0-5	0-5

B. If Fly Ash is to be substituted for cement in the production of concrete, it shall be in accordance with APWA Subsection 2212 – Fly Ash Concrete.

C. A mix design, for all concrete mixes to be used, shall be submitted to the Engineer for review a minimum of 14 days before use and be approved prior to placement.

1. The mix design shall contain the following information as a minimum:
2. Mix design designation required by Project name, location, project number and date
3. Name and location of ready-mix plant or plants
4. List the source and type of all materials from each plant supplying mix
5. CA and FA Sieve Analysis and quality checks from each plant supplying mix. CA-Ledge, quarry or mine name and location. FA-Sand plant name, location, and source (MO or Kaw River)
6. Cement chemical analysis
7. Certifications on admixtures
8. Specific gravity of all materials
9. All materials tests and certifications shall be performed no more than six months prior to the placement of any concrete mix
10. The mix design shall be based on one cubic yard of concrete or one cubic meter if required
11. The mix design shall contain the weight and volume of each mix component (S.S.D.)
12. The results of 7-day and 28-day compressive strengths shall be submitted when required
13. Special requirements for fly ash concrete mixes
14. Certification of cement and aggregate scales calibration date calibrated and company (performed yearly)
15. On bridge deck pours the concrete shall be supplied from only one plant

2.3. REINFORCEMENT

A. Bars shall conform to ASTM A 615.

B. Welded Steel Wire fabric shall conform to ASTM A 185.

C. Representative samples of supporting elements shall be submitted and approved by the Engineer prior to their use in the project.

D. Fibers (where required) shall be applied at the rate of 3 pounds per cubic yard (1.8 kg per cubic meter) of concrete. Fibers for concrete reinforcement shall be composed of only 100% virgin homopolymer polypropylene, fibrillated and graded. Fibers shall contain no reprocessed olefin materials, and shall be specifically manufactured to an optimum gradation for use as secondary concrete reinforcement, meeting the requirements of ASTM C 1116, Type III, 4.1.3, and ASTM C 1116 Performance Level 1, and a minimum residual strength of 30 psi per ASTM C 1399, average of 4 beams sampled at the point of discharge (or when appropriate, the point of placement.

2.4. ISOLATION JOINT FILLERS

A. Isolation joint fillers shall conform to ASTM D 1752 or D7174.

2.5. JOINT SEALING COMPOUNDS

A. Joint sealing compounds shall conform to the standards for the type of sealant specified as listed in the following table:

Joint Seals and Sealants	AASHTO	ASTM
Hot-poured, Polymeric Asphalt Based	M 301	D3405
Hot-poured, Elastomeric-Type	M 282	D3406
Preformed Polychloroprene Elastomeric	M 220	D2628
Lubricant for Installation of Preformed Seal	-	D2835
Preformed Expansion Joint Filler	M 213	D1751

2.6. CURING MEMBRANE

A. All material to be used or employed in curing Portland Cement Concrete must be approved by the Engineer prior to its use. It shall be of the liquid membrane type and shall conform to ASTM C 1315, Type II, Class A.

PART 3: EXECUTION

3.1. CONSTRUCTION DETAILS

A. Portland Cement Concrete pavement shall be constructed to the configuration, and to the lines and grades shown on the plans.

B. Grading and Subgrade Preparation

1. All excavation or embankment required shall be as defined in Sections 02200 – Site Preparation and Grading. If areas of the subgrade are below the lines and grades shown on the plans, they shall be brought to the proper line and grade by one of the following:

   a. Additional fill material placed in accordance with Sections 02200.

b. Areas may be filled with Granular Fill conforming to Sections 02200.

c. Areas may be filled with additional thickness of Portland Cement Concrete Pavement.

C. Forms

1. All forms shall be in good condition, clean, and free from imperfections. Each form shall not vary more than 1/4 inch in horizontal and vertical alignment for each 10 feet of length.

2. Material & Size

a. Forms shall be made of metal and shall have a height equal to or greater than the prescribed edge thickness of the pavement slab.

3. Strength

a. Forms shall be of such cross-section and strength, and so secured as to resist the pressure of the concrete when struck off, vibrated, and finished, and the impact and vibration of any equipment which they may support.

4. Installation

a. Forms shall be set true to line and grade, supported through their length and, joined neatly in such a manner that the joints are free from movement in any direction.

5. Preparation

a. Forms shall be cleaned and lubricated prior to each use and shall be so designed to permit their removal without damage to the new concrete.

3.2. JOINTS

A. Generally, joints shall be formed at right angles to the true alignment of the pavement and to the depths and configuration specified by the appropriate standard or as modified by the plans and specifications.

1. Isolation Joints

a. Isolation joints shall be placed at all locations where shown on the plans and standards or as directed by the Engineer.

b. Isolation joints shall extend the entire width of the pavement and from the subgrade to one inch below the surface of the pavement or the material will have a suitable tear strip provided to allow for the application of the joint sealer.

c. Under no circumstances shall any concrete be left across the isolation joint at any point.

d. Material: Isolation joints shall be formed by a one piece, one-inch thick preformed joint filler cut to the configuration of the correct pavement section.

e. Stability: Isolation joints shall be secured in such a manner that they will not be disturbed during the placement, consolidation and finishing of the concrete.

f. Dowels: If isolation joints are to be equipped with dowels they shall be of the size and type specified, and shall be firmly supported in place, by means of a dowel basket which shall remain in place. One half of each dowel shall be lightly painted or greased with a product approved by the engineer.

2. Contraction Joints

   a. Contraction joints shall be placed where indicated and to the depth indicated by the plans, specifications, and standards.

   b. Contraction joints shall be sawed.

   c. When sawing joints, the contractor shall begin as soon as the concrete hardens sufficiently to prevent excessive raveling along the saw cut and shall finish before conditions induce uncontrolled cracks, regardless of the time or weather. The longitudinal contraction joints shall be sawed immediately after sawing transverse joints. When joint sealing backup material is specified with sawed joints, the first stage, which provides a relief cut shall be approximately 1/8-inch wide and shall be to plan depth. The second stage which widens the joints to allow the insertion of joint sealing backup material to plan depth shall not be performed until the concrete is at least 48 hours old, and shall be delayed longer when the sawing causes raveling of the concrete. If second stage sawing is performed prior to the completion of the curing period, the contractor shall maintain the cure by use of curing tapes, plastic devices, or other materials approved by the engineer.

   d. For Portland Cement concrete pavements, sawed contraction joints shall be one-third the thickness of the slab (minimum).

   e. Dowels. If contraction joints are to be equipped with dowels they shall be of the size and type specified and shall be firmly supported in place and accurately aligned parallel to the pavement line and grade with an allowable tolerance of 1/8 inch.

3. Longitudinal and Construction Joints

   a. Longitudinal joints or construction joints shall be placed as shown on the plans or where the Contractor's construction procedure may require them to be placed. Longitudinal construction joints (joints between construction lanes) shall be keyed or tied joints of the dimensions shown on the plans or standards.

4. Transverse Construction joints

   a. Transverse construction joints of the type shown on the plans or standards shall be placed wherever concrete placement is suspended for more than 30 minutes.

5. Tie bars

   a. Tie bars shall be of deformed steel of the dimensions specified by the plans or standards. Tie bars shall be installed at the specified spacing and firmly secured so as not to be disturbed by the construction procedure.

3.3. PLACING, FINISHING, CURING, AND PROTECTION

A. Concrete shall be furnished in quantities required for immediate use and shall be placed in accordance with the requirements of MCIB Concrete Pavement. Prior to commencing construction, the contractor shall furnish a concrete delivery plan which includes at a minimum the number of trucks which will be dedicated to the project, the location of the concrete plant, the route and distance from the plant to the job site, and the anticipated rate of concrete usage. It is essential that concrete be delivered in sufficient quantities to prevent stoppage of the paving operation.

B. Concrete Placement

1. The concrete shall be deposited on the subgrade to the required depth and width of the construction lane in successive batches and in a continuous operation without the use of intermediate forms or bulkheads. The subgrade shall be moistened prior to the placement of concrete. The concrete shall be placed as uniformly as possible in order to minimize the amount of additional spreading necessary. While being placed, the concrete shall be vibrated and compacted with suitable tools so that the formation of voids or honeycomb pockets is prevented.
2. The concrete shall be well vibrated and tamped against the forms and along all joints. Care shall be taken in the distribution of the concrete to deposit a sufficient volume along the outside form lines so that the curb section can be consolidated and finished simultaneously with the slab.
3. No concrete shall be placed around manholes or other structures until they have been brought to the required grade, alignment, and cross slope.
4. Concrete shall not be allowed to extrude below the forms.

C. Concrete Finishing Methods

1. The pavement shall be struck off and consolidated with a mechanical finishing machine. Hand-finishing methods may be used for small or irregular areas. Furnish paving and finishing equipment applicable to the type of construction as follows:
2. Slip-form Machines capable of spreading, consolidating, screening, and float finishing the freshly placed concrete in one pass to provide a dense and homogeneous pavement with minimal hand finishing.
3. Self-Propelled Form-Riding Machines
    a. Furnish mechanical, self-propelled spreading and finishing machines capable of consolidation and finishing the concrete with minimal hand finishing. Do not use machines that displace the fixed side forms.
4. Manual Fixed-Form Paving Machines
    a. Furnish spreading and finishing machines capable of consolidating and finishing the concrete with minimal hand finishing.
5. Hand Methods
    a. When finishing by hand methods, concrete shall be consolidated by use of vibrating units operating in the concrete. Unless the vibrating apparatus is such that the full width of concrete is consolidated in a single passage, a definite system or pattern shall be used in the operation of the vibrator so the full width of concrete in each linear foot of lane will receive adequate and uniform consolidation. The system and methods of vibrating shall be subject to approval

of the Engineer. Vibrating equipment shall, under no circumstances, be used as a tool for moving concrete laterally on the grade.

6. Concrete Finishing

   a. Floating

      i. All surfaces shall be consolidated and floated after strike-off prior to final surface finish.

   b. Surface Tolerance

      i. After the longitudinal floating has been completed and the excess water has been removed, and while the concrete is still plastic, the slab shall be tested for trueness with a highway straightedge. The highway straightedge shall be held in successive positions parallel to the road centerline in contact with the surface and the whole area worked from one side of the slab to the other, as necessary. Advancement along the pavement shall be in successive stages of not more than one half the length of the highway straightedge. Any depressions found shall be immediately filled with freshly mixed concrete, struck off, consolidated, and refinished. Check surface longitudinally while concrete is still plastic; correct any surface deviations greater than 1/8 inch in 10 feet. Round edges of pavement to 1/8-inch radius.

   c. Edging

      i. Before final finishing is completed and before the concrete has taken its initial set, the edges of the slab and curb shall be finished to the radius shown on the plans or standards by the paving equipment, or with hand edging tools.

   d. Final Surface Finish - Dragged Surface Treatment

      i. Astroturf or burlap shall be dragged longitudinally over the finished surface to produce a tight, uniform, textured surface, and the edges shall be rounded in a workmanlike manner for roadways with a design speed of 45 MPH or to be posted 45 MPH or less. The texture achieved by the astroturf or burlap drag shall be tested by the Contractor in accordance with ASTM E 965, "Test Method for Measuring Surface Macrotexture Depth Using a Sand Volumetric Technique", to ensure the texture is adequate for skid resistance when this surface treatment is used for roadways to be posted 50 MPH or more. Test locations will be determined by the engineer. The results of ASTM E 965 shall show an average texture depth of any lot, as defined below, shall have a minimum value of 0.032 inch. Any lot showing an average of less than 0.032 inch but equal to or greater than 0.024 inch will be accepted as substantial compliance, but the contractor shall amend their operation to achieve the required 0.032 inch minimum depth. (It is not the intention of this tolerance to allow the contractor to continuously pave with an average texture depth of less than 0.032 inch. Any lot showing an average texture depth of less than 0.024 inch shall require diamond grinding of the pavement represented by this lot to attain the necessary texture. Any individual test showing a texture depth of less than 0.020 inch shall require diamond grinding of the pavement represented by this lot to attain the necessary texture. Limits of any failing individual test shall be determined by running additional tests at 100 foot intervals before and after the failing test location. All testing of the surface

texture shall be completed no later than the day following pavement placement.

e. Curing

i. As soon as practical after the concrete is finished it shall be cured with one of the acceptable methods. Curing shall conform to the requirements of MCIB Standard Concrete Specifications except waterproof paper or polyethylene sheeting shall not be acceptable as curing methods for concrete pavement. If a liquid curing membrane is used, it shall be applied in accordance to the manufacturer's directions.

ii. Method of Applying Curing Membrane

1. A nozzle producing a uniform fan pattern will be used on all spray equipment when applying the liquid curing membrane. The curing compound should be applied immediately after final finishing, and before the loss of all free water on the surface of the concrete. Normally one smooth, even coat shall be applied at a rate of 150 to 200 square feet per gallon, but two coats may be necessary to ensure complete coverage and effective protection. Second coats should be applied at right angles to the first.

iii. Curing Formed Surfaces

1. If the forms are removed from finished concrete pavement within a period of 72 hours or if a slip form paving machine has been used, these surfaces shall also be cured. Curing membrane damaged by joint sawing operations shall be repaired by the Contractor as directed by the Engineer.

f. Protection

i. The Contractor shall, at his own expense, protect the concrete work against damage or defacement of any kind until it has been accepted by the Engineer.

ii. All vehicular traffic shall be prohibited from using the new concrete pavement until it has attained strength in accordance with the following table:

Slab Thickness	Strength for Opening to Traffic psi	
	Compressive	3rd-Point Flexural
8.0”	2150	340

iii. Concrete pavement that is not acceptable to the Engineer because of damage or defacement, shall be removed and replaced, or repaired to the satisfaction of the engineer, at the expense of the Contractor.

g. Temperature Limitation

i. Concrete work shall be in accordance with the requirements of MCIB Section 2

7. Concrete Testing – All testing shall be performed by a qualified independent testing agency. All coordination and testing expense shall be the responsibility of the Contractor.

a. Air Content – An air content test shall be made on concrete from each batch of concrete from which concrete compression test cylinders are made. The Contractor shall provide all equipment and supplies necessary for the testing. Air content shall be determined in accordance with ASTM C231.

b. Slump – A slump test shall be made on concrete from each batch of concrete from which concrete compression test cylinders are made. Slump shall be determined in accordance with ASTM C143.

c. Test Cylinders – Compression test specimens shall be made, cured, stored, and delivered to the laboratory in accordance with ASTM C31 and C39. Compressive strength test will be evaluated in accordance with ACI 318 and as specified herein.

   i. One set of 6-inch diameter by 12 inch concrete test cylinders shall be cast for each concrete pour. A set of test cylinders shall consist of four cylinders, two to be broken and to have compressive strengths averaged at 7 days, and two to be broken and to have compressive strengths averaged at 28 days. All concrete required for testing shall be furnished by, and at the expense of, the Contractor. The cured cylinders shall be tested by an independent testing laboratory at the expense of the Contractor.

3.4. BACKFILL

A. A minimum of 24 hours shall elapse before forms are removed and 5 days shall elapse or the concrete must have attained 75% of its 28 day compressive strength before pavement is backfilled unless otherwise approved by the Engineer.

B. Backfill shall be accomplished in accordance with Sections 02301 entitled “Earthwork and Structural Excavation.”

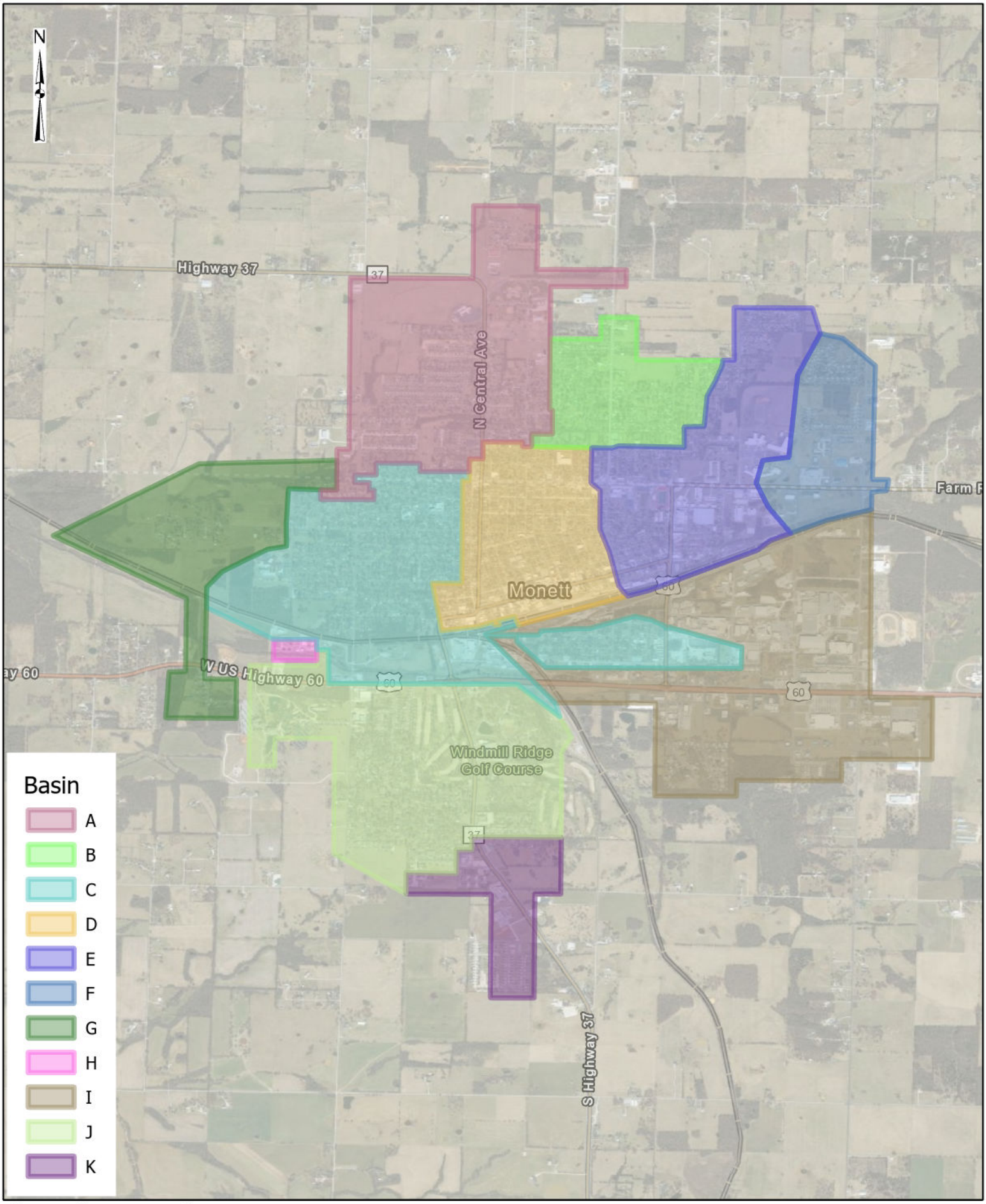
C. The Contractor shall be responsible for the repair of any existing street pavement damaged by the construction to the satisfaction of the Engineer.

3.5. JOINT SEALING AND CLEAN-UP

A. All joints shall be sealed with an approved joint sealer meeting the requirements of the products section applied in accordance with the manufacturer's directions within 7 days of the placement of the concrete and prior to the opening of the pavement to traffic.

B. The Contractor shall be responsible for the removal of excess dirt, rock, broken concrete, concrete splatters and overspray from the area of the construction.

END OF SECTION 03303



Attachment A -
City of Monett, Missouri
Sanitary Sewer Basin Map

0 1,500 3,000 6,000 Feet

TREKK DESIGN GROUP, LLC

James R. Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

www.cityofmonett.com
217 Fifth Street • Monett, Missouri 65708
(417) 235-3763

Staff Report

To: Commissioners and City Administrator

From: Skip Schaller, PE

Date: 6/18/2026

Re: Financing Substation

GENERAL INFORMATION

The Utilities Department is having a new substation built at the I00F Cemetery on the south end of the property. The total cost of the project is $3,661,931.71.

PROPOSAL

I had MPUA prepare a quote for financing for 15 years and 20 years for $3,500,000. This was to protect cash reserves in the utility from getting down to critical levels.

RECOMMENDATION

After reviewing the quotes, I recommend a 15-year plan from Central Bank of the Midwest, variable rate for 4.97% fixed for 5 years, resets every 5 years to 5-year treasury plus .75%. I don't think the risk is substantially more to go with more fixed proposals.

ATTACHMENTS

Copy of the MPUA loan proposal.

MPUA Finance Program
Municipal Lease Quote

Prepared for:

MONETT
PRIDE AND PROGRESS

City of Monett, Missouri

Prepared by the
Missouri Public Utility Alliance
2200 Maguire Blvd
Columbia, MO 65201

June 2, 2026

improving local quality of life through hometown utilities

Municipality: City of Monett, Missouri
Project: Electric Distribution Substation
Project Proceeds: $3,500,000

The MPUA Finance Program, administered through the Missouri Association of Municipal Utilities (MAMU), provides member utilities with access to competitive, tax-exempt lease purchase financing tailored to support essential infrastructure investments. This Municipal Lease Quote presents financing proposals based on current market conditions and is structured to align with the City's project funding needs.

Summary of 15-Year Proposals

Bank:	Central Bank of the Midwest[1,2]		Central Bank of the Midwest[1,3]		First State Community Bank[4,5]		First State Community Bank[4,5,6]
Maturity:	15 Year		15 Year		15 Year		15 Year
Fixed/ Variable:	Variable		Variable		Fixed		Variable
All-in Rate:	*4.97% Fixed for 5-Yrs; resets every 5 yrs to 5-Yr Treasury + .75%*		*5.37% Fixed for 10-Yrs; resets at year 11 to 5-Yr Treasury + .75%*		*5.35%*		*5.02% Fixed for 5-Yrs; resets every 5 yrs to 5-Yr Treasury + 1.65%*
Borrower's Principal Request:	$3,500,000		$3,500,000		$3,500,000		$3,500,000
Estimated Monthly P&L Payment at Full Draw:	$28,017.24		$28,758.33		$28,704.83		$28,093.43
Penalty for Early Pay-Off:	No		No		No call period of 5 years		No call period of 5 years
Proposal Good Until:	7/31/2026		7/31/2026		7/21/2026		7/21/2026

1 Central Bank of the Midwest's proposal allows financing up to $3,500,000 plus closing costs and includes a $2,000 origination fee in addition to the standard program closing cost shown on the last page.

2 Central Bank of the Midwest's proposal adjusts at year 6 and 11 at the 5 yr. U.S. Treasury Rate + 0.75%, fixed for 5 years.

3 Central Bank of the Midwest's proposal adjusts at year 11 at the 5 yr. U.S. Treasury Rate + 0.75%, fixed for remaining 5 years.

4 First State Community Bank's proposal allows financing up to $3,500,000 plus closing costs and does not include an origination fee.

5 First State Community Bank's proposal does not allow for prepayment for the first 5 years. Prepayment is allowed starting in year-6 with no penalty.

6 First State Community Banks's proposal adjusts at year 6 and 11 at the 5 yr. U.S. Treasury Rate + 1.65%, fixed for 5 years.

Disclaimer: The MPUA Finance Program does not provide financial advice. The information contained in this Municipal Lease Quote is obtained directly from participating program lenders. The services offered by the MPUA Finance Program are not and should not be regarded as investment advice or as a recommendation regarding any particular security or course of action.

Summary of 20-Year Proposals

Bank:	Central Bank of the Midwest[1,2]		Central Bank of the Midwest[1,3]		First State Community Bank[4,5]		First State Community Bank[4,5,6]
Maturity:	20 Year		20 Year		20 Year		20 Year
Fixed/ Variable:	Variable		Variable		Fixed		Variable
All-in Rate:	*5.37% Fixed for 10-Yrs; resets at year 11 to 10-Yr Treasury + .80%*		*4.995% Fixed for 5-Yrs; resets every 5 yrs to 5-Yr Treasury + .775%*		*5.52%*		*5.06% Fixed for 5-Yrs; resets every 5 yrs to 5-Yr Treasury + 1.65%*
Borrower's Principal Request:	$3,500,000		$3,500,000		$3,500,000		$3,500,000
Estimated Monthly P&L Payment at Full Draw:	$24,176.87		$23,438.74		$24,461.78		$23,552.53
Penalty for Early Pay-Off:	No		No		No call period of 5 years		No call period of 5 years
Proposal Good Until:	7/31/2026		7/31/2026		7/21/2026		7/21/2026

1 Central Bank of the Midwest's proposal allows financing up to $3,500,000 plus closing costs and includes a $2,000 origination fee in addition to the standard program closing cost shown on the last page.

2 Central Bank of the Midwest's proposal adjusts at year 11 at the 10 yr U.S. Treasury Rate + 0.80%, fixed for the remaining 10 years.

3 Central Bank of the Midwest's proposal adjusts at years 6, 11, and 16 at the 5 yr. U.S. Treasury Rate + 0.775%, fixed for 5 years.

4 First State Community Bank's proposal allows financing up to $3,500,000 plus closing costs and does not include an origination fee.

5 First State Community Bank's proposal does not allow for prepayment for the first 5 years. Prepayment is allowed starting in year-6 with no penalty.

6 First State Community Banks's proposal adjusts at years 6, 11, and 16 at the 5 yr. U.S. Treasury Rate + 1.65%, fixed for 5 years.

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This document is for presentation purposes only and does not constitute a commitment on the part of the MPUA Finance program, its partners and/or its assigns. Upon acceptance of terms by the City, the MPUA Finance Program, its partners and/or its assigns will proceed to obtain draft documents for the City to review. Commitment is subject to receipt of properly completed documentation.

The *MPUA Finance Program* provides programmatic services for the borrower from bids to closing. After closing, MPUA services the lease purchase for the life of the lease.

All bids showcased above utilize well-known and trusted partners of the *MPUA Finance Program* - **Gilmore & Bell, PC**, for bond counsel and tax opinions, and **UMB Bank**, for trust services.

Legal, origination, trustee, and financial advisor fees are due at lease signing. These fees can be paid directly by the City or included in the financing. An annual trust fee of $1,500 is reflected in the Estimated Monthly Payment provided above.

Legal: $21,000 Fixed (includes tax opinion)

Origination/Placement: $10,500 Fixed

Trustee (Disbursing/Escrow): $300 Fixed (setup fee)

Financial Advisor: $300 Fixed

Rates and payments are based on the City being bank-qualified at time of lease inception. Rates and payments may be subject to change based on market conditions and if the lease closing date is after the selected proposal's identified "good until" date.

For additional information contact Brandon Renaud at finance@mpua.org or call 573-445-3279.

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LAUBER MUNICIPAL LAW
Serving those who serve the public

MEMORANDUM

To: **LML Clients**

Date: **June 12, 2026**

Re: **Compliance with ADA website requirements**

Under a 2024 rule, state and local governments will soon be required to ensure that their online and mobile app programs, services, and activities are accessible under the Americans with Disabilities Act. This means that political subdivisions will need to implement accessible options within their websites and mobile apps. Local governments will be required to ensure their online and mobile app content meets the WCAG 2.1 Level A and Level AA requirements. Common accessible options include integrating screen readers, using "alternative text" below images, and allowing users to make color or text adjustments. Many websites already utilize accessible options. Lauber Municipal Law's new website is a good example – visit this link and click on the Accessibility Menu icon in the lower left hand corner.

When is the compliance deadline?
Cities serving 50,000 or more residents must be in compliance by April 26, 2027. Cities serving fewer than 50,000 residents must be in compliance by April 26, 2028. Special district governments, which is a public entity that is not a county, city, township, or school district, must be in compliance by April 26, 2028. These compliance deadlines were extended by the Department of Justice in an Interim Final Rule effective April 20, 2026.

What sort of website or mobile app does this apply to?
This rule applies to all websites or mobile apps that local governments host, such as a city or department website, a park reservation system, or a mobile parking app. The rule also applies to third-party websites to the public that are integrated into local government websites or apps, such as CivicPlus or CentralSquare. Many national companies that provide online services to local governments have adapted to the rule, but local governments will still need to ensure that their third-party vendors are in compliance with the rule.

What about posts made to social media sites such as Facebook or Instagram?
Because social media sites are third-party websites that the local government utilizes, unlike an integrated service like CivicPlus, local governments are not required to ensure that those sites comply with the rule. However, the content that local governments post to those sites does need to comply with the rule. For example, if a city posts an image, that post should include alternative text below it. Screen readers cannot read the image, but it can read the alternative text below the image.

Does this rule apply to all website and mobile app content, or just future content?
The rule applies to all website and mobile app content. On the local government's own websites or mobile apps, all content should be made accessible. There are a few exceptions to this portion of the rule of the web content is "archived web content." Our attorneys can help assist you in understanding whether content is archived web content. On social media sites as discussed above, local governments need not

retroactively add alternative text or provide other accessible options, but all future content should have accessible options.

What if we can't comply?
If you believe your local government will have difficulty in complying with this rule, please reach out to your assigned attorney or LML offices at (816) 525-7881. There are limited circumstances in which local governments may not comply with the rule.

James R. Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

www.cityofmonett.com
217 Fifth Street • Monett, Missouri 65708
(417) 235-3763

Staff Report

To: Mayor & Commissioner

From: City Administrator

Date: 06/19/2026

Re: Website Accessibility

GENERAL INFORMATION

WCAG (Web Content Accessibility Guidelines) versions 2.0, 2.1, and 2.2 are sets of guidelines designed to make web content more accessible to people with disabilities. While WCAG 2.0 established foundational standards in 2008, WCAG 2.1 (2018) and WCAG 2.2 (2021) extended these guidelines to address evolving technologies and diverse user needs, ensuring that digital content is accessible to people with disabilities by April 26, 2028 for cities, counties and public entities serving fewer than 50,000 people.

While the City of Monett website does meet current accessibility standards, it will fall short of the 2.2 WCAG standards as it currently lacks accessibility features like contrast and color shifters for color-blind users, and because some documents, like minutes for meetings prior to April 2024, are only available in image formats that do not make text accessible for visually impaired website users.

PROPOSAL

CivicPlus, the City's Website host, offers two accessibility programs that will ensure compliance with WCAG standards.

AudioEye is a program that provides accessibility tools like contrast and color shifters for color-blind users, font adjustments, focus tools and cursor options. AudioEye also features a quarterly audit of the website to ensure continued compliance and features a report tool to allow users to contact City staff and CivicPlus of any accessibility issues they may experience.

DocAccess is a tool that provides accessibility tools for all website images, particularly any images that contain text. This will allow users to convert text from all images into an accessible format. This will include city minutes prior to April 2024, as well as any graphic event fliers the city distributes.

To review the functionality of these programs, visit North Platte, NE | Official Website or Home Page | Tualatin Valley Water District OR.

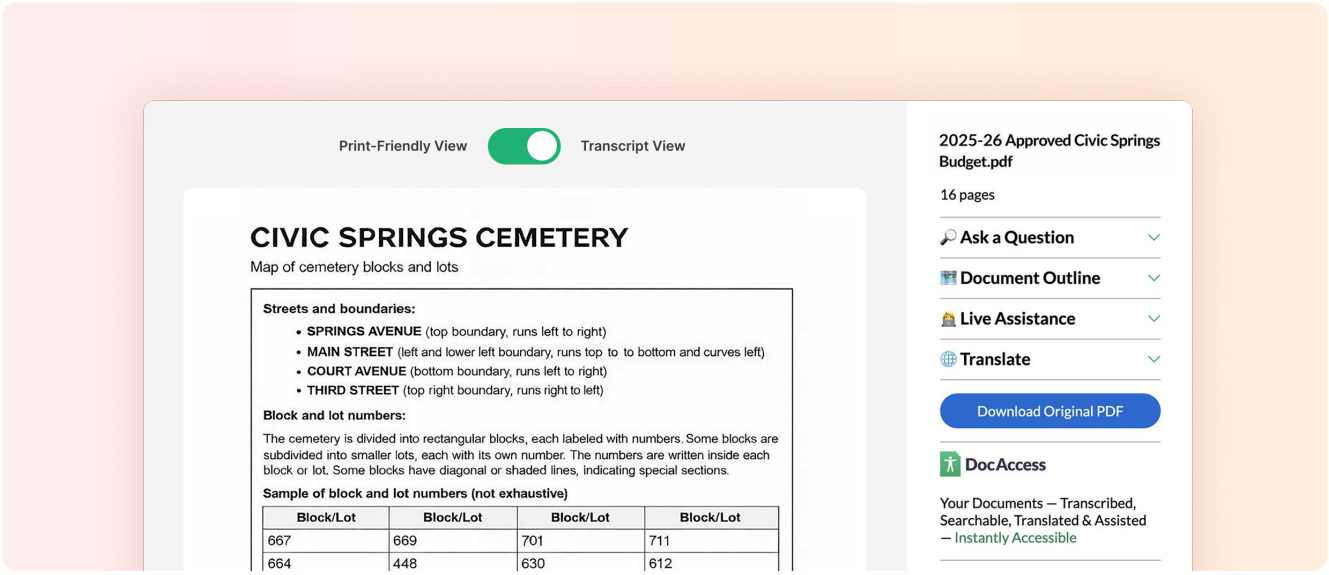
While the deadline for implementation is April 2028, staff recommend proceeding with the purchase and implementation of these programs.

RECOMMENDATION

While the deadline for implementation is April 2028, staff recommend proceeding with the purchase and implementation of these programs.

ATTACHMENTS

- CivicPlus AudioEye and DocAccess quote
- Lauber Municipal Law memo
- AudioEye Fact Sheet
- DocAccess Fact Sheet



DocAccess

Simplify compliance by automatically converting all current and future PDFs into screen reader-friendly, WCAG 2.1 AA-aligned HTML transcripts.

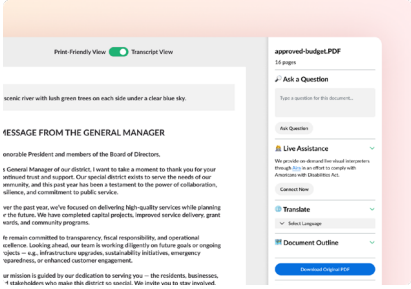
Key Benefits:

- Align all current and future PDFs to ADA standards by automatically converting documents to WCAG 2.1 AA-aligned, screen reader-friendly HTML transcripts
- Eliminate access barriers with 150+ language translations, optional live visual interpretation support, and interactive document outlines
- Empower residents to explore content with a searchable, mobile-friendly HTML format and built-in Ask a Question tool
- Save time, resources, and stress while effortlessly aligning even complex documents to accessibility standards

150+
language translations provided

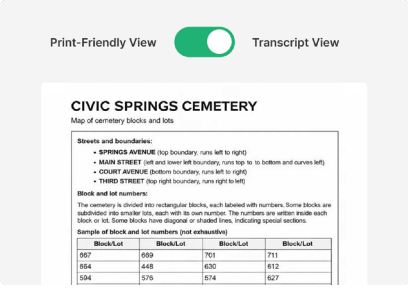
1 Day
to set up on your website

5 Minutes
for new PDFs to be automatically detected and converted



Instantly Convert Documents to HTML Transcripts

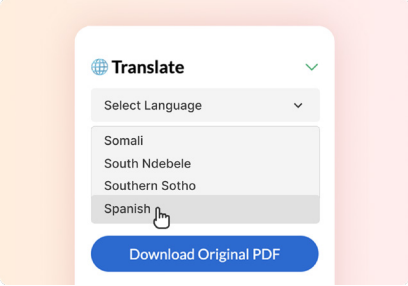
Once DocAccess is activated, all PDF links on your website automatically open in the mobile-friendly DocAccess view. Residents can use the print-friendly version or the HTML transcript, which includes detailed alt text for images.



Align Tricky Documents to WCAG 2.1 Standards

DocAccess is built for the complexity and range of government documentation. Use it to convert even your most difficult PDFs, including:

- Historical and handwritten documents
- Complex RFPs with diagrams and decision trees
- Comprehensive financial audits
- Multi-column brochures with scanned maps
- Scanned legal documents and budgets with handwritten signatures



Translate into 150+ Languages

Over 150 built-in language translations can be applied to the HTML transcript with one click. Translations also apply to DocAccess features, including the Ask a Question tool.

Ready to see it for yourself?

Get a Demo →

LAUBER MUNICIPAL LAW
Serving those who serve the public

MEMORANDUM

To: **LML Clients**

Date: **June 12, 2026**

Re: **Compliance with ADA website requirements**

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CIVICPLUS

AudioEye

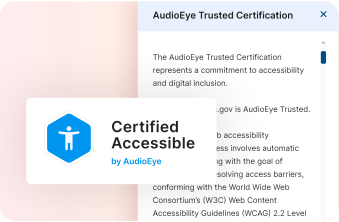
Improve compliance with hands-off web accessibility and remediation.

AudioEye Benefits:

- **Gain peace of mind** with trusted, certified website accessibility alignment to WCAG 2.2 standards
- **Demonstrate and prove accessibility efforts** with simplified reporting
- **Take the guesswork out of ADA compliance** with our unique approach that combines automated remediation, expert fixes, and continuous monitoring
- **Reduce the costs of maintaining compliance** with hands-off remediation services
- **Provide instant website accessibility and personalization for visitors with and without disabilities** with the Accessibility Help Desk tool

"Since implementing AudioEye, a huge burden has been lifted off my shoulders. I trust them to address accessibility issues, which has allowed me to focus on other priorities. It's so important to have a tool that not only improves your position on accessibility but also alleviates the heavy workload that comes with maintaining compliance at a high level. AudioEye has truly been a breath of fresh air in this regard."

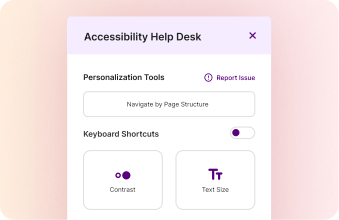
Chaquinta Fisher, IT Support Manager | McLennan Country



Hands-off Accessibility Remediation

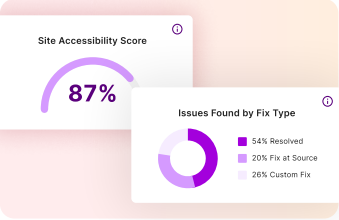
AudioEye automatically fixes most accessibility issues, while improving ongoing compliance with the latest standards. Our certified experts write custom fixes for accessibility issues on your website that automation alone can't fix.

AudioEye provides an Accessibility Trusted Certification that details and validates your organization's commitment to digital inclusion and conformance to WCAG and other ADA-related laws, mandates, and guidelines.



Accessibility Help Desk Tool

Website visitors can personalize their experiences and improve accessibility by customizing things like contrast, text size, images, and more. Additionally, users can submit feedback through a 24/7 Help Desk if they encounter access barriers on a website.



Compliance Reporting

Comprehensive reporting gives better visibility into flagged accessibility issues and enables you to effectively provide proof of compliance progress. Receive reporting for a period of time on items like site accessibility score, issue found by fix type, issues fixed by severity, top fixes applied to site, and more.

2,600+ frivolous legal claims against customers analyzed and refuted by AudioEye since 2022

AudioEye's AI-based automation and custom fixes offers 300% more protection from legal claims than traditional consulting approaches—and 400% more protection than automation-only solutions

Ready to see it for yourself?

Schedule a Demo →

CivicPlus
302 South 4th St. Suite 500
Manhattan, KS 66502
US

Statement of Work

Quote #: Q-126742-1
CivicPlus Pricing Approval Date: 6/1/2026 11:02 AM
Expires On: 7/28/2026

Client:
City of Monett, MO

Bill To:
MONETT CITY, MISSOURI

SALESPERSON	Phone	EMAIL	DELIVERY METHOD	PAYMENT METHOD
Brandon Bivins		brandon.bivins@civicplus.com		Net 30

Discount(s)

QTY	PRODUCT NAME	DESCRIPTION	12 Month Value
1.00	Web Accessibility Year 1 Annual Fee Discount	Year 1 Annual Fee Discount	USD -1,600.00

One-time(s)

QTY	PRODUCT NAME	DESCRIPTION	12 Month Value
1.00	AudioEye Managed Implementation	AudioEye Managed Implementation	USD 500.00
1.00	DocAccess Implementation	Implementation of DocAccess	USD 1,000.00

Recurring Service(s)

QTY	PRODUCT NAME	DESCRIPTION	12 Month Value
1.00	AudioEye Managed	AudioEye Managed: https://monettmo.gov/	USD 3,200.00

QTY	PRODUCT NAME	DESCRIPTION	12 Month Value
1.00	DocAccess	DocAccess is a document accessibility platform that scans, converts, and monitors PDF documents on websites to support ADA and Section 508 compliance efforts for users with disabilities.	USD 5,000.00

~~List Price - Initial Term Total~~	~~USD 10,200.00~~
Total Investment - Initial Term	USD 8,100.00
Annual Recurring Services (Subject to Uplift)	USD 8,200.00

Initial Term	12 Months Beginning at Signing
Initial Term Invoice Schedule	100% Invoiced upon Signature Date

Renewal Procedure	Automatic 1 year renewal term, unless 60 days notice provided prior to renewal date
Annual Uplift	5% to be applied in year 2

If the customer has subscribed to the DocAccess services, which is evidenced by the DocAccess line item shown above, the covered domains for the service shall be limited to:
monettmo.gov

This Statement of Work ("SOW") shall be subject to the terms and conditions of the CivicPlus Master Services Agreement and the applicable Solution and Services terms and conditions located at https://www.civicplus.help/hc/en-us/p/legal-stuff (collectively, the "Binding Terms"). By signing this SOW, Client expressly agrees to the terms and conditions of the Binding Terms throughout the term of this SOW.

Please note that this document is a SOW and not an invoice. Upon signing and submitting this SOW, Client will receive the applicable invoice according to the terms of the invoicing schedule outlined herein.

Client may issue purchase orders for its internal, administrative use only, and not to impose any contractual terms. Any terms contained in any such purchase orders issued by the Client are considered null and will not alter the Binding Terms, the Agreement or this SOW.

Acceptance of Quote # Q-126742-1

The undersigned acknowledges having read, understood, and agreed to be bound by the binding terms and conditions incorporated into this SOW. This SOW shall become effective as of the date of the last signature below ("Effective Date").

For CivicPlus Billing Information, please visit https://www.civicplus.com/verify/

Authorized Client Signature	CivicPlus
_____	_____
By (please sign):	By (please sign):
_____	_____
Printed Name:	Printed Name:
_____	_____
Title:	Title:
_____	_____
Date:	Date:

_____
Organization Legal Name:

_____
Billing Contact:

_____
Title:

_____
Billing Phone Number:

_____
Billing Email:

_____
Billing Address:

_____
Mailing Address: (If different from above)

_____
PO Number: (Info needed on Invoice (PO or Job#) if required)

James R. Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

www.monettmo.gov
217 Fifth Street • Monett, Missouri 65708
(417) 235-3763

Staff Report

To: Mayor & Commissioner

From: City Administrator

Date: June 25, 2026

Re: Budget Adjustment resolution for FY 2025-2026.

GENERAL INFORMATION

There are three unbudgeted items that were expensed in fiscal year 2025–2026. The three items are as follows.

1) Entrance expansion into North Park - $26,500
2) Information technology upgrades to the network - $1,200,000
3) Transformer for the substation located in North Park - $1,600,000 (budgeted for FY 2023-2024 & FY 2024-2025)

PROPOSAL

Presentation of a budget adjustment resolution for the three unbudgeted items.

RECOMMENDATION

Council approval of the resolution at the July 9, 2026, regularly scheduled Council meeting.

ATTACHMENTS

- Schedule of unbudgeted FY 2025-2026 with Resolution numbers.

BILL NO. _____ **RESOLUTION NO. _____**

A RESOLUTION AUTHORIZING THE CITY COUNCIL OF MONETT, MISSOURI TO APPROVE BUDGET ADJUSTMENTS WITHIN THE FISCAL YEAR 2025-2026 BUDGET EXPENDITURES.

WHEREAS, the City of Monett has incurred expenses outside the approved budget for fiscal year 2025 - 2026; and

WHEREAS, the need for the expenses incurred has enhanced the services, safety, or welfare of the citizens of Monett, Missouri; and

WHEREAS, the City of Monett is liable for the expenses incurred due to the receiving of goods, utilized services, or consumed resources; and

WHEREAS, the City of Monett has financial capacity to pay debts and financial obligations rendering the city solvent.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI AS FOLLOWS:

SECTION 1: A budget adjustment to FY2025-2026 budget be made for the improvements to the North Park entrance in the amount of $26,500.

SECTION 2: A budget adjustment to the FY2025-2026 budget be made for improvements to the network system and information technology upgrades in the amount of $1,200,000, approved by Council for emergency services.

SECTION 3: A budget adjustment to FY2025-2026 budget be made for improvements and purchase of the transformer to be located at the electric substation in the amount of $1,600,000, approved as purchase order fiscal year 2023 – 2024.

Whereupon a roll call vote was taken:

Ayes: _____

Nayes: _____

Passed and approved this 9th day of July 2026

_____

James R. Burke, Mayor

DRAFT

ATTEST:

_____

Kelley McMillan, City Clerk

DRAFT

Non-Budgeted Expense			
Date	**Description**	**Amount**	**GL Code**
6/27/2025	Tennis Court Renovations - MOU with School	$ 150,000.00	Transer from Park Sales Tax 18-52 53-59387 to 01-41-49-41300 $18,750 monthly
	Market Comparison Wage Study Res 9064	$ 127,000.00	Not sure on the total amount - Split codes to be determined
7/10/2025	Kiwanis Playground Agreement Res. 9082.	$ -	Kiwanis to continue fund raising Res. # 9082
8/14/2025	South Park Mega Playground Res. 9084	$ 302,770.40	18-52-53-59387 South Park Capital
11/13/2025	Connection Road 37-H Hwy - Owen Res. 9110	$ 35,500.00	17-51-53-59517 Connetion Road 37 to H Hwys
11/14/2025	Fire Station 3 - Owen Res. 9110	$ 7,000.00	27-61-53-59009 Fire Station 3
11/15/2025	Connection Road 37-H Hwy - Zanevan Res. 9110	$ 191,500.00	17-51-53-59517 Connetion Road 37 to H Hwys
11/16/2025	Fire Station 3 - Zanevan Res. 9110	$ 96,000.00	27-61-53-59003 Fire Station 3
8/14/2025	City Annex Res.# 9087	$ 137,700.00	# 54 split 01, 06, 07 & 08 - $34,425.00 each department
1/5/2026	N Park entrance Res #	$ 26,500.00	
5/30/2025	IT upgrades - Emergency Res. #	$ 1,200,000.00	
8/27/2024	Transformers for Substation - PO #7373 8/27/24	$ 1,600,000.00	Paid 3/06/26
	TOTAL	**$ 909,770.40**	
	Desk top>non-budgeted expenses		

Gateway Sign Project

MONETT

PRIDE AND PROGRESS

Formation of a Gateway Sign Committee

- Appointed by the Mayor and approved by the Council.
- Representatives of the community.
- Non-residence could serve who have vested interest in Monett.
- The committee would be 12 – 14 members.
- Co-chairs of the committee to ensure meeting continuity.

Scope of Work for the Committee

- Commission the design of the sign (must incorporate the City of Monett logo)
- Provide opportunities for community input
- Raise funds using public-private sources
- Provide oversight of the project from conception to construction
- Plan the celebration of the completion ceremony

Potential Timeline for the Gateway Sign Project

- Formation of the Committee – August 2026
- RFQ for design architect – September 2026
- Selection of Designs – October 2026
- Selection of top three designs – November 2026
- Reveal of the top three designs – January (State of the City) 2027
- Community Open Houses – February 2027
- March Final Selection – March 2027
- Fund Raise for the Project – build TBD

Entry Signs into the City

- The city will take on updating the entry signs with the new city branding.
- The designs will be shared with the Gateway Sign Committee to ensure continuity.
- The oversight of the entry signs currently resides with the Monett Area Chamber of Commerce.

MONETT

PRIDE AND PROGRESS

Entry sign on Highway 60 by hospital

Entry sign on Highway 37 – North

Entry sign on Highway 37 – South

Location – Highway 60 & Highway 37

Examples of Gateway Signs – City of Monett logo must be incorporated

MONETT

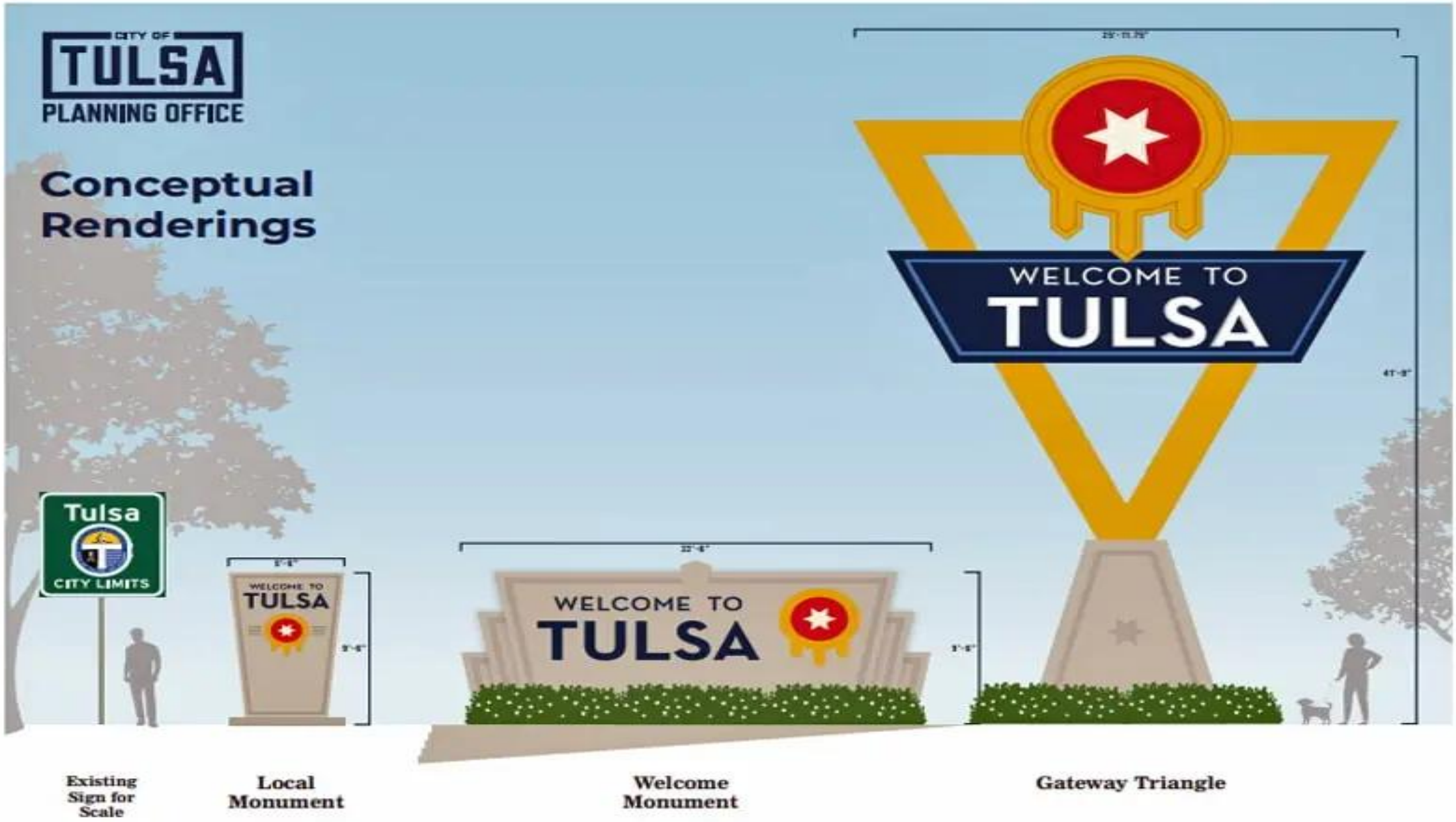
PRIDE AND PROGRESS

WELCOME TO RICHMOND
HILLTOP DISTRICT

Vehicular
Wayfinding - Large
Gateway Sign
Welcome to Bartlesville
Johnstone Park
Price Tower
Lee Lake
Welcome to
BARTLESVILLE
EST.
1897

CITY OF TULSA
PLANNING OFFICE

Conceptual Renderings



Existing Sign for Scale

Local Monument

Welcome Monument

Gateway Triangle

SouthLake
a church for the region
www.slnaz.org

Dunwoody

ROYAL OAK

CITY OF MONETT
1888
PRIDE AND PROGRESS

James R. Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

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(417) 235-3763

Staff Report

To: Mayor & Commissioner

From: City Administrator

Date: June 25, 2026

Re: Repurposing of the American Legion flagpole.

GENERAL INFORMATION

The former American Legion Hall is located at 717 East Broadway Street. The facility has the original flagpole in front of the building. The flagpole is on city-owned right-of-way. The American Legion Post 91 has requested that the Council review the possibility of repurposing the flagpole. The new location would be next to the Freedom Park monument, scheduled for placement this fall.

The request includes the use of City staff to remove and refurbish the flagpole. The placement at the new site would also be completed by City staff.

PROPOSAL

The repurposing of the American Legion flagpole to be used at Freedom Park

RECOMMENDATION

Discussion with Council.

ATTACHMENTS

AMERICAN LEGION

DOLLAR GENERAL
FLAG
RETIREMENT
DROP
BOX

BILL NO. XXXX ORDINANCE NO. XXXX

AN ORDINANCE AMENDING MONETT TITLE V – BUILDING AND CONSTRUCTION BY ADDING A NEW SECTION 500.105 – ESTABLISHING A VACANT BUILDING REGISTRATION AND MAINTENANCE PROGRAM FOR THE CITY OF MONETT, MISSOURI

WHEREAS, the City of Monett has identified that vacant and abandoned buildings can contribute to neighborhood decline, create safety hazards, and impose costs on the public; and

WHEREAS, the City is authorized pursuant to Sections 67.398 and Chapter 89 of the Revised Statutes of Missouri to regulate vacant property, structures, and nuisances; and

WHEREAS, the City Council finds that the registration and regulation of vacant buildings is necessary to protect the health, safety, and welfare of the citizens of Monett;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI, AS FOLLOWS:

Section 1. It is the purpose and intent of the City of Monett to establish a program to address the deterioration and blight of city neighborhoods caused by an increasing number of abandoned, condemned, foreclosed, or distressed real properties located within the city, and to identify, regulate, and reduce the number of abandoned properties located within the city. It is the city's further intent to establish registration requirements as a mechanism for code enforcement to protect neighborhoods from becoming blighted due to the lack of adequate maintenance and security of abandoned, condemned, and foreclosed real property. It is recognized that blight lowers property values, leads to deteriorating conditions, undermines the quality of life, affects the public health, safety and general welfare and also results in human injury and criminal activity. It is also determined that vacant and unoccupied structures demand an inordinate amount of the City's administrative and ordinance enforcement resources. As such, the city finds the prolonged presence of vacant and abandoned structures to be unacceptable to the citizens of the City of Monett.

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Section 2. The Council does hereby amend Title V – Building and Construction by adding a new Section 500.105 to read as follows *Italicized*:

Section 500.105 – ***Vacant Building Registration and Maintenance***

A. Definitions*: The following words, terms and phrases, when used in this Section shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning:*

1. ***Abandoned****: means real property that is vacant and under a current notice of default or notice of sale, or property that has been the subject of a foreclosure sale where the title was retained by the beneficiary of a deed of trust involved in the foreclosure and any properties transferred under a deed in lieu of foreclosure or sale.*
2. ***Accessible structure****: means a structure that is unsecured or breached in such a way as to allow access to the interior space by unauthorized persons.*
3. ***Accessible property****: means a property that is accessible through a compromised, breached, or broken gate, fence, or other entry point by unauthorized persons.*
4. ***City****: means the City of Monett, Missouri.*
5. ***Days****: means consecutive calendar days.*
6. ***Deed of trust****: means a recorded instrument that transfers ownership of a property to a third-party trustee as security for a real estate loan. This definition includes any subsequent deeds of trust.*
7. ***Deed in lieu of foreclosure or sale****: means a recorded document that transfers ownership of a property from the trustor to the holder of a deed of trust upon consent of the beneficiary of the deed of trust.*
8. ***Default****: means the failure to fulfill a contractual obligation, monetary or conditional.*
9. ***Evidence of vacancy****: means any condition that combined with other conditions present, would lead a reasonable person to believe that the property is vacant. Such conditions include, but are not limited to: overgrown or dead vegetation; accumulation of newspapers, circulars, flyers or mail; past due utility notices or disconnected utilities; stagnant swimming pool water; accumulation of trash, junk, or debris; the absence of window coverings such as curtains, blinds, or shutters; the absence of furnishings or personal items consistent with residential habitation; statements by neighbors, passersby, delivery agents, or government employees that the property is vacant.*
10. ***Foreclosing and foreclosure****: have the same meaning, that being the process by which a property, placed as security for a real estate*

loan, is prepared for sale to satisfy the debt if the borrower (trustor) under a deed of trust defaults.

11. ***Initiation of the foreclosure process****: means taking any of the following actions:*

    (1) Delivering a notice of default to the borrower;
    (2) Delivering the mortgagee's notice of intention to foreclose to the borrower; or
    (3) Commencing a foreclosure action on a property in a court of law.

12. ***Joint liability****: means any owner or person in control of a property or subsequent owner of a property for which a notice of violation to correct building code violations has been issued shall be jointly and severally liable for the costs incurred by the city for abatement of violations on the property. Joint and several liability shall be attributed to each entity in the chain of title from the date of issuance of orders forward.*
13. ***Local****: means within the city limits of Monett, Missouri.*
14. ***Notice of default****: means a notice that a failure to fulfill a contractual obligation, monetary or conditional, has occurred.*
15. ***Out of area****: means outside the city limits of Monett, Missouri.*
16. ***Property****: means any improvements, buildings or structures or portions thereof regardless of condition.*
17. ***Securing****: means such measures as may be directed by the building inspector, or his/her designee, that assist in rendering the property inaccessible to unauthorized persons including, but not limited to, the repairing of fences and walls, chaining/padlocking of gates, the repair or temporary boarding of doors, windows, and other openings.*
18. ***Vacant****: means a property at which the Building Inspector has substantially determined all lawful business operations or residential occupancy has ceased. In determining whether a property is vacant, it is relevant to consider, among other factors, the condition and value of any items in the property and the presence of continuous nuisance and code violations on the property; provided that multi-family residential property containing four or more dwelling units shall only be considered vacant when the majority of all of the dwelling units become unoccupied and a majority remain unoccupied for more than six months without the property being actively listed for sale.*
19. ***Willful and intentional****: means the failure to register or take the necessary actions to register as required under this article after two successful attempts by the building inspector's office to notify the responsible party of their responsibility to register the property. Such actions shall constitute a rebuttable presumption that the responsible*

party has willfully and intentionally failed to register as required under this article.

B. ***Annual registration of vacant, condemned, and/or foreclosing properties required****: Applying to all vacant, condemned or foreclosing properties, as defined in this article, including properties owned, operated, or subsidized by public or nonprofit agencies. This article shall be in force on all existing properties within one calendar year, three hundred and sixty five (365) days of the date of passage.*

1. *Adherence to this article does not relieve the owner or any other party of any applicable obligations set forth in any other ordinances which may apply to the property.*
2. *Registering vacant or foreclosing properties pursuant to this article does not relieve any party of any obligation to otherwise record property information.*
3. *Registration of an abandoned structure does not preclude the city from taking appropriate actions to secure the property; or to issue orders to repair or abate dangerous, hazardous, or unlawful conditions; or from acting to eliminate an imminent hazard to public health and safety.*
4. *All owners must register vacant and/or foreclosing properties as defined in this article annually with the building department of the city by submitting a vacant/foreclosing property registration form provided by the city.*

    (1) The cost of the annual registration, inspection, and plan review shall be $150.00.

    (2) All vacant property, within 365 days of becoming and remaining vacant, shall be registered by the owner or agent on approved forms from the city.

    (3) All foreclosing properties, within 90 days of initiation of the foreclosure process as defined in this article, must be registered by the party initiating the foreclosure process on approved forms by the city.

        b.) At the time of registration with the city, the party initiating the foreclosure process must send written notice addressed to the occupant of the property that the foreclosure process has been initiated. Notice shall be sent by regular United States mail, postage pre-paid.
5. *All owners or agents shall apply for registration on a form provided by the building department which shall include provision for the following information:*

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(1) The common name of the property, if any, the exact street address of the property, and the number of units in each building on the property.
(2) An identification of the owner(s) by full name, mailing address and telephone number. If the mailing address is a P.O. Box, it must also include a physical address for service of process. If the property is owned by a corporation, limited liability company, partnership, limited partnership, trust or real estate investment trust, the name, address and telephone number of any of the following shall be provided:

a.) For a corporation, a corporate officer and the chief operating officer;
b.) For a partnership, the managing partner;
c.) For a limited liability company, the managing or administrative member;
d.) For a limited partnership, a general partner;
e.) For a trust, a trustee; or
f.) For a real estate investment trust, a general partner or an officer.
g.) If the owner does not reside within the city, he or she shall designate a local agent who shall be authorized to receive on behalf of the owner service of any notice, order or summons issued because of a violation of this code. Such agent must be an individual over the age of 18 years and must reside within the city or reside within a 60 mile radius of the city. All official notices may be served on the responsible local agent and any notice so served shall be deemed to have been served upon the owner of record. A registered agent's signature shall indicate consent to the designation.
h.) After receipt of the completed application, payment of the fee, and processing of the application; the owner or their authorized representative shall arrange a time for an inspection to be completed by the building inspector to determine the existing condition of the property. The owner or authorized representative shall be present during such inspection. A detailed inspection report will be created by the building inspector and a copy provided to the property owner within seven days.

C. Posting

1. ***Contact information**: Within 30 days of registering the property, every owner of a vacant property shall post an exterior-facing notice in a*

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front window furnishing the 24-hour contact name and telephone number for a person responsible for maintaining the property. The address of the contact shall also be provided on the posting. The posting shall be hung from the interior of the window.

2. ***Premises identification:*** *The owner shall also post the address on front of the home within 30 days of registering the property. The address must be clearly visible from the street.*

D. ***Plan of Action*** *- All owners of vacant buildings that are condemned, but have been deemed repairable by the building inspector, may submit a plan of action on approved forms to repair the building and premises thereof in conformance with city ordinances prior to issuance of permits. The plan of action shall include at a minimum:*

1. *The address of the vacant building or structure.*
2. *The owner's name, address and telephone number.*
3. *A timeframe in which repairs are to be completed not to extend beyond one (1) calendar year.*
4. *A detailed plan to repair any walls, floors, structure, electric, plumbing, doors, windows, etc. or other openings which are otherwise secured by any means other than conventional methods used in the design of the building or permitted for new construction of a similar type.*
5. *The property owner shall submit a plan of action to the building inspector within 90 days of the property owner's receipt of the detailed inspection report, in accordance with the guidelines set forth within this article, and such plan of action shall be submitted to, and approved by, the building inspector prior to issuance of any permits. If refused by the building inspector, an acceptable plan must be submitted in 30 days.*
6. *If no plan is submitted, the plan is not followed, or the owner fails to submit an acceptable plan to the building inspector shall recommend to the Monett Building Board that the building shall be ordered demolished within six (6) months.*
7. *If the building is going to be rehabilitated, then the building or residential structure must be heated to avoid freezing pipes, fuel gas pipe systems must be maintained gastight, safe, and in working condition, and water pipes must be maintained to avoid leaks and/or breakage.*
8. *Fuel tanks will be maintained so as not to be a hazard or will be disconnected in a manner consistent with the 2017 National Fire Protection Code.*

E. ***Demolition of properties****: All owners of vacant buildings that have been condemned who wish to demolish the structure adjudged by the building*

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inspector to be too damaged, decayed, or cost ineffective to repair, must submit a demolition permit application as part of their plan of action with all applicable fees and a set of plans showing the demolition site, location of utilities, and all existing buildings.

1. *All buildings to be demolished must be demolished within six (6) months of an applicable demolition permit*
2. *Inclement weather may delay demolition requiring an extension from the building inspector.*
3. *Owner assumes all responsibility for asbestos testing, if needed, and for any liability resulting from the demolition of the building or the resulting debris.*

F. ***Notice on sale or transfer of property**:*

1. *Every owner selling or transferring title to a vacant, condemned, or foreclosed property registered, as provided in this article, shall give notice, in writing, to the building department within 30 days of closing. This notice shall include the name, address and telephone number of the buyer and a notarized statement from the buyer that they are aware of the condition of the property, have seen the inspection report, and either plan to repair or demolish the structure.*
2. *The new owner shall have 30 days from the date the change of ownership occurred to file a new registration with the building department if structure is still unfit for occupancy. There shall be a $150.00 fee for this new registration and the property must be re-inspected.*

G. ***Exceptions to registration**:*

1. *The property is the subject of probate proceedings or its title is otherwise the subject of current litigation, not including foreclosure proceedings. This exception shall not be applicable for more than 36 months without permission of the building inspector.*
2. *The property has been used as a second residence by a person entitled to possession for a period of at least three (3) months within the previous nine months and the same person intends to resume residing at the property.*
3. *A property shall not be considered vacant which is being currently marketed by a licensed real estate professional hired by the former or current occupant of the property and to which water service has not been shut-off.*

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H. ***Notice on occupancy of property*** *- Every owner of a property registered as provided in this article that becomes occupied after approval of the building inspector that the action plan for the property is complete, shall give notice in writing to the building inspector within 30 days of occupancy.*

I. ***Inaccurate or incomplete registration information; violation*** *- It shall be a violation of this code and unlawful for an owner or a responsible person to provide inaccurate information for the registration of vacant or foreclosing properties or to fail to provide information required by the city for the registration or to fail to register. Violators shall be punished as set forth in this article.*

J. ***Boarding standards*** *- The premises shall remain secure and locked. Broken windows and doors may be temporarily covered with boarding material, in accordance with Section D, boarding standards, for a time period no greater than thirty (30) business days, while arrangements are being made to replace the broken glass or broken parts of existing windows and doors. Otherwise windows and doors must be maintained in good repair and not boarded up.*

K. ***Administration; violation; penalties****:*

1. *Whenever an owner or agent of a structure or premises fails to abate the conditions specified in this article or any order of the Planning & Zoning Commission or City Council after appeal within the time specified therein, the owner or agent shall be fined not more than $500.00/month. Each month of violation shall be a separate offense.*
2. *Any owner who fails to complete their approved plan of action, unless an exception is made by the building inspector, shall be fined not more than $500.00 per month for each month of noncompliance. Each month of violation shall be a separate offense.*
3. *If the owner fails to remove the building within six (6) months, or fails to pursue removal of the building without unnecessary delay, the enforcement officer shall recommend to the Monett Building Board the building to be demolished. The costs of removal may include an administration fee for the city's costs.*

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Section 3. The new change shall take effect upon the passage of this Ordinance and fees shall only be levied three hundred and sixty five (365) days from passage on the effective date.

Section 4. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 5. If any section, subsection, sentence, clause, or phrase of this ordinance is, for any reason, held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance.

Whereupon a roll call vote was taken:

Ayes: _____

Nayes:_____

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI, THIS _____ DAY OF _____, 2026.

_____

James R. Burke, Mayor

ATTEST:

_____

Kelley McMillan, City Clerk

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PRIDE AND PROGRESS

Randy Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

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Staff Report

To: **Planning and Zoning Commission**

From: **Andrew Miller, Development Assistant**

Date: **2/13/2026**

Re: Safety and Security Impacts of Vacant Building Registry

GENERAL INFORMATION

One aspect of vacant buildings that had gone unmentioned in the previous staff report on Vacant Building Registries is the tie-in to property and personal security.

Although vacant buildings can cause a variety of issues, one of the particular issues caused by vacant buildings in Monett is squatting. Not a particular problem along the downtown Broadway commercial district, the older residential areas of Monett do struggle from lots of various forms of squatting.

As an example, our town residents may unfortunately pass away or need to relocate for higher levels of care, etc., and the house becomes vacant. In some situations, either the home will pay out on utilities until money runs out, or code enforcement fines eventually begin to accrue. Very sadly, sometimes these homes sit in probate or in vacancy until they are sold at a tax or bank sale. During these intermediary periods, squatters or other trespassers often may occupy the home.

For a variety of reasons, we neither allow, nor support squatting. However, we are also very hamstrung due to various higher-level laws and limitations to our authority.

With the introduction of a Vacant Building Registry, we could apply certain requirements to said listed buildings, such as requiring boarded up entryways, windows, etc. Although certainly an eyesore, other requirements could then kick in, such as a graduating scale of fines associated with leaving said buildings vacant.

I want to reiterate again that City staff at this time does not intend for the Vacant Building Registry to be a method of revenue generation. I am merely sharing possible ways it could be used. I reiterate that the goal of the Vacant Building Registry is to fill the vacancies with residents or commercial uses.

GENERAL INFORMATION, CONT.

If we look instead towards the commercial space of vacant buildings, security becomes a larger aspect. I moved to Monett from St. Louis, where large scale commercial fires of abandoned warehouses are statistically unusually common. As on the first very cold night of 2025, like every year, an abandoned warehouse complex stretching four city blocks went up in flames and completely demolished the city blocks. In searching for this information, I found two different abandoned building fires had killed multiple people within the past two weeks.

Insurance costs to keep and maintain commercial properties continues to grow. The liability aspect of insurance, especially, continues to grow at a fast pace. Ideally, this would incentivize vacant building owners to sell their properties, but it often results in these properties going uninsured and the non-vacant building owners end up paying higher prices to cover for it. Having a Vacant Building Registry would allow for our Code Enforcement and Police activities to be more focused and aware of it.

There are no proposals, recommendations, or attachments to this staff report.

MONETT
PRIDE AND PROGRESS

Randy Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

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Staff Report

To: **Planning and Zoning Commission**

From: **Andrew Miller, Development Assistant**

Date: **1/26/2026, Updated 2/9/2026**

Re: **Vacant Building Registry Basics**

GENERAL INFORMATION

In Community Development, there is a tool known as a "Vacant Building Registry". The name, however, is a slight misnomer, as it rather functions as a tool to promote the redevelopment of vacant properties.

When a City – no matter the size – suffers from an exceptional number of vacant buildings, the City's ultimate goal is to have these buildings reoccupied, rehabilitated, or redeveloped. Abandoned or vacant buildings, however, tend to be a comparatively high cost to municipalities for their respective tax revenue. In Cities such as Monett, where there is no City property tax, these buildings are purely a cost-heavy utility/service cost to the City. Even if the occupied use of the properties isn't directly revenue-generating (such as residential occupation), indirect revenue is generated through sales tax revenue and other methods.

The concept of a vacant build registry began as a tool for municipalities to track their vacant buildings – such as the name implies. Generally, this registry would incorporate building owners, contact information, previous uses of the building, and perhaps the owner's length of vacancy. These registries often come with a small administrative cost.

The following should be prefaced: the Community Development Department does not intend to introduce the Vacant Building Registry with any associated cost at this time.

As the indirect costs of vacant buildings become more clear (insomuch as their negative revenue generation), these costs would eventually be tallied as "costs" put against properties on the vacant building registry. Many Cities who have implemented vacant building registries have found an agreeable cost that offers the property owners a gentle nudge in the direction of redevelopment of the property.

GENERAL INFORMATION, CONT.

Aggressive utilizations of this cost-transfer onto vacant buildings can have overly strong results, so the goal would be to find an digestible amount of influence that the vacant building registry would have upon the City.

This concept of "costing" building owners to sit on vacant buildings would be joined by an educational initiative from the Community Development Department, whose goal would be to educate building owners on the different possibilities they have for redevelopment.

Other concepts, like the Chapter 353 initiative for downtown building owners, are different methods to achieve the goal of non-vacant, revenue-generating buildings within the City.

Attached are copies of the ordinances belonging to Rayton, Missouri (population 29,000) and St. Clair, MO (population 5,000) regarding Vacant Building Registries. In both cases the penalties for not registering these properties or violations for not maintaining said properties are steep, but Rayton, MO does not add an annual cost to their registration, while St. Clair, MO requires a $150.00 annual cost.

At the current time, the Community Development Department is exploring the introduction of said registry by ordinance, and is likely to have something drawn up in the coming months.

There are no proposals or recommendations as part of this staff report.

ATTACHMENTS

Please see the following attachments, for your own reading on these topics:

1. A Good Community.org article on Vacant Building Registries
2. Example of Vacant Building Registry: Rayton, Missouri City Codes
3. Example of Vacant Building Registry: St. Clair, Missouri City Codes
4. A Good Community.org article on Adaptive Reuse

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Staff Report

To: **Planning and Zoning Commission**

From: **Andrew Miller, Development Assistant**

Date: **3/19/2026**

Re: Vacant Building Registry

GENERAL INFORMATION

The Community Development Department is presenting the for consideration, comment, and recommendation, the implementation of a Vacant Building Registry (henceforth abbreviated VBR) for the City of Monett. Provided as an attachment to this staff report is a draft of said Registry in the form of an example ordinance. The Community Development Department is seeking recommendation for approval – with our without recommended modifications – in order to pass this VBR onto the City Council for approval. This staff report shall serve as part 1 of 2 staff reports, with the main focus of this report being to describe the purposes, intents, and goals of the VBR for Monett.

The City of Monett and Community Development Department are faced with the following issues:

1. Blight lowers property values, leads to deteriorating conditions, undermines the quality of life, and affects the public health, safety, and general welfare of the City
2. Vacant and unoccupied structures demand an inordinate amount of the City's administrative and ordinance enforcement resources

Thus, the City finds that the prolonged presence of vacant and abandoned structures to be unacceptable to the citizens of Monett. Therefore, the City intends to do the following:

1. Establish a program to address the deterioration and blight of City neighborhoods caused by an increasing number of abandoned, condemned, foreclosed, or distressed real properties within the City
2. To identify, regulate, and reduce the number of abandoned properties within the City

Therefore, the City's goals for the VBR are as follows:

1. To address the deterioration and blight of City neighborhoods
2. To establish registration requirements as a mechanism for code enforcement
3. To protect neighborhoods from becoming blighted due to the lack of adequate maintenance and security of abandoned, condemned, and foreclosed real property

GENERAL INFORMATION, CONT.

The City plans to implement a *Vacant Building Registration and Maintenance Program* as a two-part system to achieve the above-described goals.

The Vacant Building Registry announces to vacant property owners – and all Monett residents – that the City intends to begin mitigation measures to alleviate the vacant building problem existing here in the City through a variety of means. The VBR is a request by law for owners of current or at any time newly-vacant property owners to begin communication with the City about the property owner's plans to bring said property back into regular, working, occupied order.

This plan, encompassed by the Maintenance Program portion of the system, requires vacant property owners to follow established guidelines on the protection, security, stabilization, and revitalization of their vacant properties in accordance with the law, in conjunction with a plan agreed upon by both the property owners and the Community Development Department.

The eventual goal of this two-part system is to incentivize property owners to make their properties no longer vacant through multiple ways. There will be a second staff report with additional details and specifics, but the methods to incentivize these property owners will include the following:

- Incentivizes owners to occupying properties through the small administrative fee levied against unoccupied or abandoned properties
- Creates a local-agent requirement for non-local vacant property owners – incentivizing local ownership, thus leading to a sense of local, social responsibility
- Self-identifies ownership of vacant properties – placing pressure onto owners to avoid complaints being levied against vacant properties
- Establishes a rehabilitation-focused goal of returning these properties to habitability and a non-vacant nature through department-supported maintenance programs with actionable timeframes
- Incentivizes either transfer of ownership or demolition of vacant and abandoned properties – opening avenues for new development or removal of blight

The department acknowledges that for all non-punitive measures, there needs to be punitive measures enacted to enforce adherence to the ordinances. There are several "stick"-based reasons for property owners to become a part of the VBR and establish a program for rehabilitation, too:

- Reasonably heavy fines for non-registration to the VBR following a long period of commencement
- Levying of liens against properties for said fines for unresponsive vacant property owners
- Recommendation of properties in violation of the law to be made to the Building Board – resulting in either rehabilitation, ownership transfer, or demolition or non-recommendation by the Build Board

GENERAL INFORMATION, CONT.

Further, we want to reiterate that there are exceptions to the Vacant Building Registry that will be discussed in the second staff report. This second staff report will walk through the various portions of the ordinance, specifically.

PROPOSAL

The Community Development Department, in conjunction with City Staff, is proposing the implementation, following a one-year commencement period, of a Vacant Building Registration and Maintenance Program affecting all vacant and abandoned real property within the City of Monett. The Community Development Department is also seeking any proposed changes from the Planning and Zoning Commission regarding said Vacant Building Registry prior to taking this ordinance to the City Council.

RECOMMENDATION

The Community Development Department recommends that the Planning and Zoning Commission vote to recommend for approval this Vacant Building Registry and Maintenance Program to the City Council, based upon the understanding that the implementation of such a Vacant Building Registry will serve as a multitude of methods to incentivize property owners to:

1. Not allow their properties fall into extended vacancy or abandonment
2. Keep properties from becoming hazards to public health, safety, and general welfare for the City
3. Eliminate blight within the City through the rehabilitation-focused Maintenance Program in conjunction with the Community Development Department
4. As a last resort, turn to the demolition of said vacant, abandoned, or unsafe property

The end result of the implementation and action of such an ordinance will be a measurable reduction in blight found within the City of Monett, along with safer neighborhoods, higher property values, and a closer representation of the mission statement of the City of Monett.

ATTACHMENTS

Please see the following attachments:

1. Attached Draft Bill Implementing the Vacant Building Registry and Maintenance Program
2. Additional Staff Report on specifics of the Vacant Building Registry

MONETT
PRIDE AND PROGRESS

Randy Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

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(417) 235-3763

Staff Report

To: **Planning and Zoning Commission**

From: **Andrew Miller, Development Assistant**

Date: **3/19/2026, Updated 3/26/26**

Re: Specifics of the Vacant Building Registry and Maintenance Program

GENERAL INFORMATION

Please see the earlier staff report on the generalities of the Vacant Building Registry (henceforth VBR) for reference. This staff report shall focus on key topics, portions, or specifics of the VBR and Maintenance Program, where appropriate to share. Commissioners should read through the attached ordinance itself for more minute specifics.

The VBR will go into effect immediately upon approval of the City Council following the 10-day approval period, and all existing vacant and abandoned property owners will then have a period of 365 days before enforcement of these existing vacant property owners will begin. Similarly, owners of newly vacant or abandoned property will have 365 days from the point of vacancy to register their property with the VBR or the property will be considered in violation.

To clarify a question that has arisen – No, the VBR does not apply to vacant, undeveloped, and unimproved land. There is no current requirement (and no requirement is being made) for an undeveloped property to be developed. This ordinance only focuses on buildings, specifically.

One of the main goals of the VBR is to track the following information:

1. What is a building owner doing with a vacant building?
2. Why is the vacant building vacant?
3. What will be done to correct the unexcused vacancy?

The determination of what makes a building “vacant” can be through an individual or combination of a variety of factors both described in the code and open to determination of the Community Development Department and the Building Board. As defined in the code, a building is considered vacant when “substantially all lawful business operations or residential occupancy has ceased.” However, in determining evidence of vacancy, there are many types of evidence included (and listed out in the attached draft) that could be used as evidence of vacancy:

- Overgrown or dead vegetation
- Accumulation of newspapers, circulars, flyers, or mail
- Past due utility notices or disconnected utilities

GENERAL INFORMATION, CONT.

- Stagnant swimming pool water
- Accumulation of trash, junk, or debris
- The absence of window coverings such as curtains, blinds, or shutters
- The absence of furnishings or personal items consistent with residential habitation
- Statements by neighbors, passersby, delivery agents, or government agents of vacancy

These factors, as well as yet-undetermined reasons for evidence of vacancy, would be used to paint the picture of vacancy for a particular building. To be clear, these don't prove vacancy, but rather would be used to add credence to the idea that a property is vacant.

The annual cost/fee of registration on the VBR will be $150.00 to be paid under regular terms.

Every individual vacant building will require a separate registration. Multiple habitable buildings on each property will require different registrations – such as the case of multiple different apartment buildings, duplexes, or homes on a single parcel.

Garages, sheds, and other examples of non-primary structures will be impacted by this registry and program as well. There would be a reasonable interpretation of vacancy is this regard.

If a property is not registered in the reasonable time as allotted in the ordinance, refuses to register, refuses to acknowledge or agree to a property maintenance plan, or refuses to adhere to said agreed upon maintenance plan (among other reasons), the violation may be levied against the building (and thus, the owner). This puts the onus on the owner to do *something* with the property to avoid the fees – or pay said fees.

The violation and enforcement portion of the ordinance is approximately $500.00 per month for a property in violation. Unpaid violations would be enforced through the traditional lien process placed upon the property. The lien process is generally successful in recuperating funds levied against properties by the City in the past (when said properties are eventually sold).

When a property goes into foreclosure, the party initiating the foreclosure will need to register the property with the VBR and begin the Property Maintenance Program portion of the ordinance, even if the property is not yet vacant (before the occupant has finished the eviction process – if that so applies).

Specific exceptions include property being actively worked upon with permitted work, actively being sold by a license real estate professional with certain utilities services kept active, property being used a second-residence by an owner who occupies the property for at least 3 months within the previous nine-month period, as well as a property currently under litigation or probate proceedings, as long as the proceedings have not exceeded 24 months. There are likely certain cases that would need to be added to these exceptions as decided by the Community Development Department.

GENERAL INFORMATION, CONT.

Of note – the Building Board does not regularly meet, and only meets to discuss either putting a "Dangerous Building/Structure" lien upon a property, consideration of demolition, or the removal of a property from being a dangerous structure. This VBR and Property Maintenance Program would likely lead to more meetings of the Building Board. Said Board would be advised on the passage of this ordinance if it were to go into effect.

PROPOSAL

The Community Development Department is proposing the introduction of a Vacant Building Registry and accompanying Property Maintenance Program as described in the attached draft ordinance. The Department is open to modifications as requested by the Planning and Zoning Commission, where reasonable.

RECOMMENDATION

Combined with previous staff report's Recommendation

The Community Development Department recommends that the Planning and Zoning Commission approve the recommendation of the Vacant Building Registry and accompanying Property Maintenance Program. The VBR focuses on the gathering of information and establishing a rulebook for tackling the problem of vacant buildings and all the problems that they cause, while the Property Maintenance Program establishes and agreed-upon plan between the Community Development Department and these vacant building owners to either rehabilitate a vacant building, remove a vacant building, or actively sell a vacant building to another owner willing to rehabilitate or remove said building. The implementation of this Registry and Program would begin the long process of rehabilitating the buildings in Monett and beautify its neighborhoods.

ATTACHMENTS

Please see the following attachments:

1. Draft Ordinance of the Vacant Building Registry and Property Maintenance Program
2. Previous Staff Report(s) on the VBR

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Mickey Ary, City Administrator

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Staff Report

To: **Planning and Zoning Commission**

From: **Andrew Miller, Development Assistant**

Date: **2/13/2026**

Re: Safety and Security Impacts of Vacant Building Registry

GENERAL INFORMATION

One aspect of vacant buildings that had gone unmentioned in the previous staff report on Vacant Building Registries is the tie-in to property and personal security.

Although vacant buildings can cause a variety of issues, one of the particular issues caused by vacant buildings in Monett is squatting. Not a particular problem along the downtown Broadway commercial district, the older residential areas of Monett do struggle from lots of various forms of squatting.

As an example, our town residents may unfortunately pass away or need to relocate for higher levels of care, etc., and the house becomes vacant. In some situations, either the home will pay out on utilities until money runs out, or code enforcement fines eventually begin to accrue. Very sadly, sometimes these homes sit in probate or in vacancy until they are sold at a tax or bank sale. During these intermediary periods, squatters or other trespassers often may occupy the home.

For a variety of reasons, we neither allow, nor support squatting. However, we are also very hamstrung due to various higher-level laws and limitations to our authority.

With the introduction of a Vacant Building Registry, we could apply certain requirements to said listed buildings, such as requiring boarded up entryways, windows, etc. Although certainly an eyesore, other requirements could then kick in, such as a graduating scale of fines associated with leaving said buildings vacant.

I want to reiterate again that City staff at this time does not intend for the Vacant Building Registry to be a method of revenue generation. I am merely sharing possible ways it could be used. I reiterate that the goal of the Vacant Building Registry is to fill the vacancies with residents or commercial uses.

GENERAL INFORMATION, CONT.

If we look instead towards the commercial space of vacant buildings, security becomes a larger aspect. I moved to Monett from St. Louis, where large scale commercial fires of abandoned warehouses are statistically unusually common. As on the first very cold night of 2025, like every year, an abandoned warehouse complex stretching four city blocks went up in flames and completely demolished the city blocks. In searching for this information, I found two different abandoned building fires had killed multiple people within the past two weeks.

Insurance costs to keep and maintain commercial properties continues to grow. The liability aspect of insurance, especially, continues to grow at a fast pace. Ideally, this would incentivize vacant building owners to sell their properties, but it often results in these properties going uninsured and the non-vacant building owners end up paying higher prices to cover for it. Having a Vacant Building Registry would allow for our Code Enforcement and Police activities to be more focused and aware of it.

There are no proposals, recommendations, or attachments to this staff report.

BILL NO. XXXX ORDINANCE NO. XXXX

AN ORDINANCE APPROVING THE RE-ZONING OF A TRACT OF LAND OWNED BY THE MONETT VETERINARY HOSPITAL

WHEREAS, the Planning & Zoning Commission of the City of Monett met during a publicly announced meeting at the Monett City Annex at 6:00PM on June 18th, 2026; and

WHEREAS, the Planning & Zoning Commission of the City of Monett has conducted a review of the request to re-zone an unaddressed parcel of land immediately west of 215 Dairy Street; and

WHEREAS, the Planning & Zoning Commission of the City of Monett voted 4-0 to recommend the re-zoning petition to the Monett City Council; and

WHEREAS, the City has provided proper notice and conducted a public hearing regarding the proposed zoning changes;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI, AS FOLLOWS:

Section 1: Zone change to Local Business (Commercial) "C" from Second Residential (Multiple Dwelling) "B" for the property immediately west of 215 Dairy Street as represented by the following legal description:

Barry County

A part of the Southeast quarter of the Southeast Quarter of Section 31, Township 26 North, Range 27 West, Monett, Barry County Missouri, being more particularly described as follows:

Commencing at the Northeast Corner of Lot 3, Block 2, Jones-Thomas Subdivision; Thence South 88°31'26" East along the Southerly right-of-way of Dairy Street as now located 189.90 feet to the point of beginning.

Thence continuing South 88°31'26" East along said right-of-way 189.90 feet; thence South 02°38'46" West departing said right-of-way 274.76 feet to the Northerly right-of-way of US Highway "60" as now located; thence North 88°32'55" West along said Northerly right-of-way 186.44 feet, thence North 01°55'28" last departing said right-of-way 274.79 feet to the point of

DRAFT

beginning; containing 1.19 acres more or less. Subject to any and all encumbrances and right recorded or unrecorded.

Subject to any easements, rights of way, restrictions, reservations and covenants of record or fact.

Whereupon a roll call vote was taken:

Ayes: _____

Nayes:_____

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MONETT, MISSOURI, THIS 9TH DAY OF JULY, 2026.

_____
James R. Burke, Mayor

ATTEST:

_____
Kelley McMillan, City Clerk

DRAFT

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PRIDE AND PROGRESS

Randy Burke, Mayor
Ken Gaspar, Commissioner • Darren Indovina, Commissioner
Mickey Ary, City Administrator

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Staff Report

To: **Planning and Zoning Commission**

From: **Andrew Miller, Development Assistant**

Date: **6/1/2026**

Re: Rezoning Petition for Monett Veterinary Hospital

GENERAL INFORMATION

Petitioner Erin & Zach Carnes – owners of the Monett Veterinary Hospital on Dairy St. (the Vet) – are seeking a rezone an unaddressed part of the property that their veterinary clinic sits upon. For the sake of clarity, I recommend looking at the attached map to understand where this property is.

To my understanding, the original purchase of the property upon which the Vet currently sits upon was merely a preexisting building upon the east half of their current owned property. It is my understanding that the following things occurred, but it is unknown in which order they occurred:

1. The Vet rezoned their parcel from Zone "B" to Zone "C" in 2019 through P&Z.
2. The Vet purchased an immediately-western adjoining lot for future expansion.
3. The Vet expanded their current building with addition that extended across the western boundary into this new lot.
4. The Vet built their new parking lot upon the new land (still zoned "B").

All of this occurred and everything was completed within the realms of the law and our practices. This is just backstory and has little effect on the current rezoning petition.

At this time, however, the Vet would like to build a commercial sign for their establishment in the unused area of their owned western lot, immediately west of the parking lot. However, since this sign would qualify as a structure (or quasi-structure), they do need to rezone this half of their land to Zone "C" Commercial to be allowed to build their sign.

To be clear, their intentions are not to build a billboard. Billboards can only be built in industrial zones, and this rezoning would not allow them to build a billboard. This has been shared with the petitioner. Their sign can only be used to advertise their own services.

The change in zoning for this parcel is in line with the proposed Future Land Use Map as described in the yet-to-be-adopted City Comprehensive Plan. Likewise, the lots immediately to the west and east of this property are already zoned "C" Commercial.

PROPOSAL

Petitioner Erin & Zach Carnes of the Monett Veterinary Hospital are seeking to rezone their owned property immediately west of the Monett Veterinary Hospital from Zone "B" Multi-Family to Zone "C" Commercial in order to build a sign for their own business.

RECOMMENDATION

The Planning and Zoning Commission recommends that the City Council pass this rezoning request in order to match the zones of the surrounding lots, to correct the zoning upon which a commercial property is already being used, and to match the proposed Future Land Use Map.

ATTACHMENTS

Please see the following attachments:

1. Petition for Amendment of Zoning Ordinances
2. Monett GIS Map of the Vet Hospital indicating Zoning
3. Barry County GIS Map of the Property to be Rezoned
4. Notice of Public Hearing
5. Newspaper Proof
6. Meeting Minutes from April 19th, 2019 P&Z Commission (available upon request, only)

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Ken Gaspar, Commissioner • Darren Indovina, Commissioner
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(417) 235-3763

Petition for Amendment of Zoning Ordinance

Rezoning Petition

To the Planning and Zoning Commission of the City of Monett, and the City Council of the City of Monett, Missouri:

Come now petitioners Dr Erin Caines, and states and shows to the City Planning and Zoning Commission and the City Council as follows:

That said parties are the owners of the following described real estate situated in

Barry County, Missouri within the city limits of the City of Monett, Missouri to-wit:

(see attached legal description of the property)

The above-described real estate is also known as: 215 Dairy St and Lot to the West

That according to the provisions of the zoning ordinances of the City of Monett, said real estate is currently zoned as district B.

An amendment is being requested to change the classification of the real property and its permitted uses from district B to district C.

Wherefore, petitioners request that the Council refer this petition to the Planning and Zoning Commission for report and recommendation and thereafter public notice to hold a public hearing and thereafter by ordinance shall provide classification of the above-described real property and thereby grant the requested amendment to zoning.

Dated this 22 day of May, 2026.

Signature of Petitioner: [signature]

MONETT

PRIDE AND PROGRESS

Application & Procedures for Rezoning

Owner Name: Dr Ema Cairns

Owner Mailing Address: 215 Dairy St Monett, MO 65708

Owner Phone Number: 417 489 0055 Email: monettvet@outlook.com

Applicant Name (if different): _____

Applicant Mailing Address: _____

Applicant Phone Number: _____ Email: _____

Acknowledgement:

There currently is no direct fee taken by the City for rezoning property. However, as part of the rezoning process, and according to the City's ordinances, the petitioner must pay the publishing costs the City incurs in providing the legally required public notice period to the public. All publishing costs incurred by the City will be reimbursed by the petitioner prior to the Planning and Zoning meeting during which it shall be discussed. If this is not paid prior to the meeting, the petition will not be discussed during the meeting.

Likewise, the petitioner must provide the following items as part of the rezoning petition:

☑ Proof of ownership of the property (property deed)

☑ Legal Description of the property (usually found on the deed)

If you have any questions, please contact Andrew Miller, Development Assistant of the City of Monett at amiller@monettmo.gov or by calling 417-235-5306 ext. 2755.

By signing below, I acknowledge that I read and understand the above acknowledgement, acknowledge that I am required to pay publishing costs prior to the Planning and Zoning commission meeting during which this shall be held, and that I cannot be added to the meeting agenda until all items have been provided to the Community Development Department at the City of Monett.

Signature of Petitioner: _____ Date: 5-22-26

Signature of Applicant: _____ Date: _____

MONETT
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Acknowledgement

State of Missouri)
) ss.
County of Barry)

On this 22 day of May, 2026, before me, a notary public,

personally appeared Zack Carnes & Erin Carnes

to me known to be the person(s) described in and who executed the same as

their free act and deed.

In Testimony, Whereof, I have set my hand and affixed by seal at my office in

Monett, Missouri on the day and year first above written.

Terry Moller
Notary Public

My commission expires: Oct 03, 2027

TERRY MOLLER
Notary Public - Notary Seal
State of Missouri
Commissioned for Lawrence County
My Commission Expires: October 03, 2027
Commission Number: 15419525

Recorded in Barry County, Missouri
Recording Date/Time: **05/13/2022** at **02:47:47 PM**
Book: **22** Page: **3173**
Instr #: **202203230**
Pages: **2**
Fee: **$27.00 S**

Electronically Recorded
RANDALL MASRI AND RANDALL PC

RECORDER OF DEEDS SEAL BARRY COUNTY, MO

Danielle Still
Recorder of Deeds

DEED OF PERSONAL REPRESENTATIVE

Know all men by these presents, that

WHEREAS, the Probate Division of the Circuit Court of Barry County, Missouri, is not required to order, authorize or direct the undersigned in the nature of an independent administration of estate, Rebecca Thomas, as Personal Representative of the Estate of Jo Ann Thomas, deceased, can sell, at private sale, for cash, the real property hereinafter described belonging to the estate of said decedent and to use the appraisal of said real property filed with the Inventory of said estate, and

WHEREAS, in obedience to said Order, I am on May 13, 2022, selling said real property at private sale to Carnes Holdings, LLC. for Forty-two Thousand Dollars ($42,000.00) in cash with said sale being for more than 70% of the appraised value of said real property as shown by the appraisal thereof filed with the Inventory of said estate, and

NOW THEREFORE, in obedience to the orders of said Court and in consideration of the payment to me by the said Carnes Holdings, LLC, of the full purchase price for said real property in cash as specified in said Order to sell real property as stated above, the receipt of which is hereby acknowledged, I, Rebecca Thomas, as Personal Representative of the Estate of Jo Ann Thomas , deceased, do hereby Sell and Convey unto the said **Jo Ann Thomas**, her heirs and assigns, all of the right, title and interest which the said Jo Ann Thomas, deceased, had at the time of her death in and to the following described real property lying, being and situate in Barry County, Missouri, to-wit:

A part of the Southeast quarter of the Southeast Quarter of Section 31, Township 26 North, Range 27 West, Monett, Barry County Missouri Being more particularly described as follows:

Commencing at the Northeast Corner of Lot 3, Block 2, Jones-Thomas Subdivision; Thence South 88°31'26" East along the Southerly right-of-way of Dairy Street as now located 189.90 feet to the point of beginning.

Thence continuing South 88°31'26" East along said right-of-way 189.90 feet; thence South 02°38'46" West departing said right-of-way 274.76 feet to the Northerly

right-of-way of US Highway "60" as now located; thence North 88°32'55" West along said Northerly right-of-way 186.44 feet, thence North 01°55'28" last departing said right-of-way 274.79 feet to the point of beginning containing 1.19 acres more or less Subject to any and all encumbrances and right recorded and unrecorded.

Subject to any easements, rights of way, restrictions, reservations and covenants of record or fact

To have and to hold the premises aforesaid, with all and singular the rights, privileges, appurtenances and immunities thereunto belonging or in any wise appertaining unto the said **Carnes Holdings, LLC**, his heirs and assigns, forever.

IN WITNESS WHEREOF, I, Rebecca Thomas, as Personal Representative of the Estate of Jo Ann Thomas, deceased, have hereunto set my hand and seal on this the 12th day of May, 2022.

Rebecca Thomas

Rebecca Thomas,
Personal Representative of the Estate of Jo Ann Thomas, deceased.

STATE OF MISSOURI)
COUNTY OF BARRY)

On this the 12th day of May, 2022, before me, a Notary Public in and for said County and State, personally appeared **Rebecca Thomas,** 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 **Personal Representative of the Estate of Jo Ann Thomas,** deceased.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in Monett, Missouri, the day and year last above written.

Notary Public

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JAMES J. RANDALL
My Commission Expires
October 5, 2023
Lawrence County
Commission #11543600

Doc ID: 003119130002 Type: WTY
Recorded: 09/05/2018 at 09:53:08 AM
Fee Amt: $27.00 Page 1 of 2
Barry County, Recorder
Craig Williams Recorder
BK 18 PG 6226

3700

Security Abstract & Title

WARRANTY DEED

THIS INDENTURE, made on the 31st day of August, A.D. Two Thousand Eighteen, by and between **Brent E. Herrin** and **Cordelia F. Herrin**, husband and wife, of Barry County, Missouri, Grantors, and **Carnes Holdings, LLC, a Missouri Limited Liability Company**, of the County of Barry in the State of Missouri, Grantee, whose mailing address is 507 Elm, Pierce City, MO 65723.

WITNESS, That the said Grantors, in Consideration of the sum of Ten Dollars and other good and valuable considerations, to them paid by the said Grantee, the receipt of which is hereby acknowledged, do by these presents **Grant, Bargain and Sell, Convey and Confirm** unto the said Grantee, its successors and assigns, the following described lots, tracts of land, lying, being and situate in the County of Barry, State of Missouri, to-wit:

Tract 1:
Commencing at the Southeast corner of the Southeast Quarter of the Southeast Quarter of Section 31, Township 26, Range 27, Barry County, Missouri, thence North 635.5 feet to the South line of Dairy Street, thence West along said line 445.6 feet to point of beginning: thence South 273.5 feet, thence North 89 degrees 23 minutes West 183.4 feet, thence North 271.5 feet to the South line of Dairy Street, thence East 183.4 feet to the point of beginning.
Subject to any easements, rights of way or restrictions of record or fact.

Tract 2:
All that part of the Southeast Quarter of the Southeast Quarter of Section 31, Township 26 North, Range 27 West, Barry County, Missouri, described as follows: Commencing at a set iron pin at the Northwest corner of Lot 1, Block 2 of Jones-Thomas Subdivision recorded in Plat Book 3 at Page 109, thence South 88 degrees 32 minutes 00 seconds East along the South right of way line of Dair Street, 679.86 feet to a set iron pin and the point of beginning: thence South 02 degrees 38 minutes 41 seconds West along an existing fence line 274.71 feet to a set iron pin on the North right of way line of U. S. Highway 60, thence South 88 degrees 32 minutes 00 seconds East along said right of way line 11.57 feet to the Southeast corner of a tract of land recorded in Book 07 at Page 4922, thence North 01 degrees 53 minutes 16 seconds East along the East line of said tract of land 274.66 feet to a point on the South line of aforesaid Dairy Street, thence North 88 degrees 32 minutes 00 seconds West along said South right of way line 7.94 feet to the point of beginning,

containing 0.06 acres, more or less. Subject to any existing easements or restrtictions of record.

TO HAVE AND TO HOLD the premises aforesaid with all and singular the rights, privileges, appurtenances, and immunities thereto belonging, or in anywise appertaining unto the said Grantee, and its successors and assigns **Forever**, the said Grantors hereby covenanting that they are lawfully seized of an indefeasible estate in fee in the premises herein conveyed; that they have good right to convey the same; that the said premises are free and clear of any incumbrance done or suffered by them or those under whom they claim; and that they will Warrant and Defend the title to the said premises unto the said Grantee, and unto its successors and assigns forever, against the lawful claims and demands of all persons whomsoever.

IN WITNESS WHEREOF, The said Grantors have hereunto set their hands and seals, the day and year first above written.

Brent E. Herrin

Cordelia F. Herrin

STATE OF MISSOURI,)
) ss.
County of Barry)

On this 31st day of August, A.D. 2018, before me personally appeared Brent E. Herrin and Cordelia F. Herrin, husband and wife, to me personally 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, at my office in Cassville, Missouri, the day and year first above written.

Barbara Ray
Notary Public

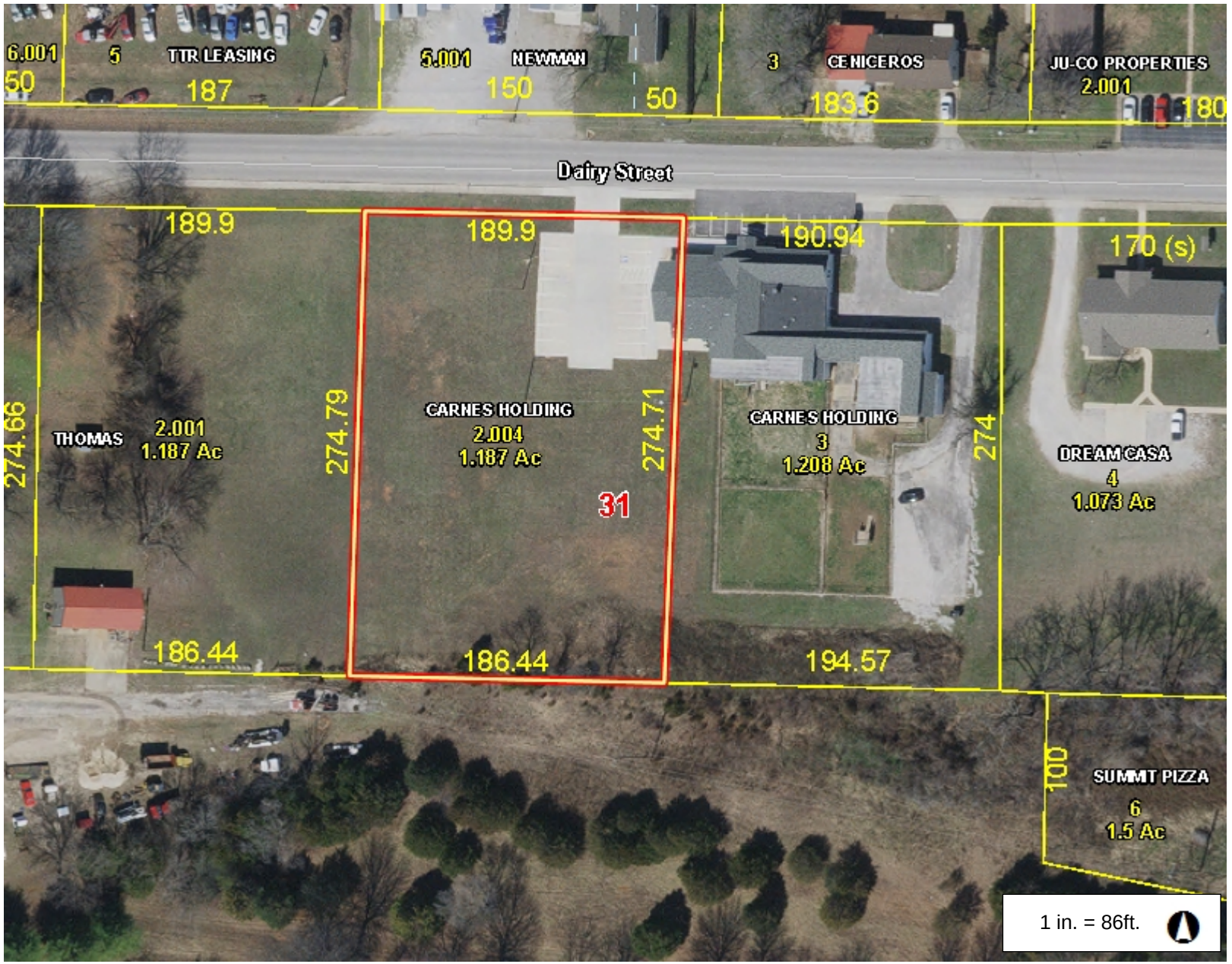
BARBARA RAY
Notary Public - Notary Seal
STATE OF MISSOURI
Commissioned for Barry County
My Commission Expires 3/9/2022
Commission # 14846178

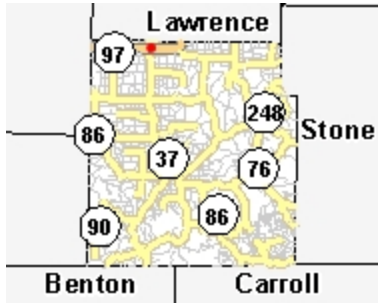
Prepared by Ellis, Cupps and Cole

E:\Real Estate\2018\Carnes - Herrin\Warranty Deed.doc

15' Alley
15' Alley
140'
1
500'
Zone B
60'
Dairy St
100'
100'
100'
67.5'
1
204.8'
169'
2
2
3
274.9'
Zone C
Zone B
3
MARSHALL ESTATE S
82'
55.7'
Waldensian Rd
Us Hwy 60
100'
Us Hwy 60

Barry County, MO





Legend

- Road Centerlines
  - US Highway
  - State Highway
  - Roads
- Railroad
- Parcel
- Parcel Number/Acres
- Owner Last Name
- Corporate Limit Line
- Land Hook
  - Solid
  - Dashed
- Lot Line
- Sections
- County Boundary

Notes

172.2 0 86.10 172.2 Feet

This Cadastral Map is for informational purposes only. It does not purport to represent a property boundary survey of the parcels shown and shall not be used for conveyances or the establishment of property boundaries.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

NOTICE OF PLANNING AND ZONING COMMISSION HEARING

Notice is hereby given to all interested parties that a meeting of the Planning and Zoning Commission has been scheduled for **June 18th, 2026 @ 6:00pm.** The following is a tentative agenda for that meeting:

Consideration and Review of the following

Rezone the below parcel from zone "B" Multi-Family Residential to zone "C" Local Business (Commercial).

Barry County

A part of the Southeast quarter of the Southeast Quarter of Section 31, Township 26 North, Range 27 West, Monett, Barry County Missouri, being more particularly described as follows:

Commencing at the Northeast Corner of Lot 3, Block 2, Jones-Thomas Subdivision; Thence South 88°31'26" East along the Southerly right-of-way of Dairy Street as now located 189.90 feet to the point of beginning.

Thence continuing South 88°31'26" East along said right-of-way 189.90 feet; thence South 02°38'46" West departing said right-of-way 274.76 feet to the Northerly right-of-way of US Highway "60" as now located; thence North 88°32'55" West along said Northerly right-of-way 186.44 feet, thence North 01°55'28" last departing said right-of-way 274.79 feet to the point of beginning; containing 1.19 acres more or less. Subject to any and all encumbrances and right recorded or unrecorded.

Subject to any easements, rights of way, restrictions, reservations and covenants of record or fact.

Notice is further given that said Commission of the City of Monett, Missouri at the hour of **6:00pm on the 18th day of June 2026** will consider said agenda. The meeting of the Planning and Zoning Commission will be held in the Council Chambers at the Monett City Annex, located at 100 South Maple Street. The meeting is open to the public and all interested parties may attend and be heard.

/s/ Mike Wallace

_____

Chairman-Planning and Zoning Commission

AFFIDAVIT OF PUBLICATION

Date: 06-03-2026

STATE OF MISSOURI)
COUNTY OF LAWRENCE) ss.

I, Ryan Squibb, being duly sworn according to law, state that I am the Publisher of the *Lawrence County Record*, a weekly newspaper of general circulation in the Counties of Lawrence and Barry, State of Missouri, where located; which newspaper has been admitted to the Post Office as periodical class matter in the City of Mt. Vernon, Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of more than three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310, Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following issues:

1st Insertion: Vol. 151 No. 16, 3rd day of June, 2026
2nd Insertion: Vol. ____ No. ____, _____ day of _____, 2026
3rd Insertion: Vol. ____ No. ____, _____ day of _____, 2026
4th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
5th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
6th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
7th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
8th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
9th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
10th Insertion: Vol. ____ No. ____, _____ day of _____, 2026
11th Insertion: Vol. ____ No. ____, _____ day of _____, 2026

Ryan Squibb, Publisher

Subscribed and sworn to before me on this 3rd day of June, 2026.

Teresa R. McBride, Notary Public

My commission expires March 10, 2030

Publication fee $ 133.95 #16380

TERESA R. McBRIDE
Notary Public - Notary Seal
STATE OF MISSOURI
Lawrence County
My Commission Expires Mar. 10, 2030
Commission #14396197

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/s/ Mike Wallace
Chairman-Planning and Zoning Commission

_____ **#R-16380-6-3-1tc**