ADDENDUM NO. 1

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Install Pedestrian Bridge at Pleasant Hill
Over Union Pacific Railroad
Katy Trail State Park
Pleasant Hill, Missouri
Project No. X2311-01

Bid Opening Date: 1:30 PM, Tuesday, September 10, 2024 (Not Changed)

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

SPECIFICATION CHANGES:

1. Section 011000 – Summary of Work
   a. Information on anticipated train traffic and available closure windows during construction have been added to section 1.4 Contractors Use of Premises.

2. Section 311000 – Clearing and Grubbing
   a. Clarification on limits of tree clearing has been added to section 3.1 Clearing.
   b. Clarification on mulching and burning has been added to section 3.5 Removal and Disposal.

3. Section 312410 – Embankment in Place
   a. Allowance of incorporating a certain limit of on-site mulch into the embankment topsoil has been added to section 2.2 Topsoil.

GENERAL COMMENTS:

1. The Pre-Bid Meeting was held on August 21, 2024 at 10:00 AM. The Pre-Bid Meeting sign-in sheet is attached.
2. Please contact April Howser, Contract Specialist, at 573-751-0053 or April.Howser@oa.mo.gov for questions about bidding procedures, MBE\WBE\SDVE Goals, and other submittal requirements.
3. The deadline for technical questions was August 30, 2024 at 12:00 PM.
4. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
5. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
6. Current Plan holders list available online at https://www.oafmdcplanroom.com/projects/2540/plan-holders/x2311-01-install-pedestrian-bridge-at-pleasant-hill-over-union-pacific-railroad
7. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.
8. **All bids shall be submitted on the bid form without additional terms and conditions, modifications, or stipulations. Each space on the bid form shall be properly filled. Failure to do so will result in rejection of the bid.**
9. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. Only certified firms**

as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.

ATTACHMENTS:

1. Specification Section 011000 – Summary of Work
2. Specification Section 311000 – Clearing and Grubbing
3. Specification Section 312410 – Embankment in Place

September 4, 2024

END OF ADDENDUM NO. 1

SECTION 011000 – SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. The Project consists of constructing a new pedestrian bridge grade separation along the existing abandoned Rock Island Railroad Spur alignment and over the existing Union Pacific Railroad Tracks. The improvements include a 845' prefabricated pedestrian truss bridge with driven steel piles and cast-in-place concrete foundations. The project will also include construction of approach embankments leading up to both bridge ends with a crushed stone trail surface. Drainage ditches and riprap slope protection will be provided to adequately collect stormwater runoff.

1. Project Location: **Pleasant Hill, Cass County, Missouri; Katy Trail State Park.**

2. Owner: State of Missouri, Office of Administration, Division of Facilities Management, Design and Construction, Harry S Truman State Office Building, Post Office Box 809, 301 West High Street, Jefferson City, Missouri 65102.

B. Contract Documents, dated **06/14/2024** were prepared for the Project by **Thouvenot, Wade and Moerchen, Inc., 3316 Lemone Industrial Boulevard, Suite 2, Columbia, Missouri 65201.**

C. The Work consists of constructing a pedestrian bridge grade separation over Union Pacific Railroad in Pleasant Hill, Missouri.

1. The Work includes clearing and grubbing, grading and shaping, pedestrian bridge construction, riprap slope protection, crushed stone base and surface rock, railings and seeding.

2. The Work includes the below two (2) driven pile options. The Contractor shall select one of the two options to include in their lump sum base bid and indicate their selected option on the Bid Form.

1) Steel HP Pile – Option A

2) Steel Shell Pile – Option B

D. The Work will be constructed under a single prime contract.

1.3 WORK SEQUENCE

A. Project will be completed and ready for use no later than 260 working days (includes "bad weather" days) after Intent to Award (ITA).

1.4 CONTRACTOR USE OF PREMISES

A. General: During the construction period the Contractor shall have full use of the premises for construction operations, including use of the site. The Contractor's use of

the premises limited only by the Owner's right to perform work or to retain other contractors on portions of the Project.

B. Use of Wetland Areas: Limit use of existing wetland areas to the limits and impacts shown on the plans. If the Contractor determines that additional impacts are necessary for construction of this project, the Contractor shall notify the Owner or Owners Representative prior to beginning the Work.

C. Train Traffic: Contractors work activities shall be designed to cause no interruption to the railroad's operations, enabling the track to remain open to traffic per the railroad's requirements. Anticipated train traffic is 2-3 trains per day. 24-hour closure windows will be available to the Contractor during construction on Saturdays only. Closure windows shall be coordinated with the railroad contact listed on the plans.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 011000

SECTION 311000 – CLEARING AND GRUBBING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this section.

B. Related work specified elsewhere:
   1. Section 312300 - Excavation and Fill
   2. Section 312410 – Embankment in Place

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION

3.1 CLEARING

A. Tree clearing shall be restricted to the period between November 1st and March 31st to prevent any incidental take of federal endangered bats. If tree clearing is planned outside of these dates, the contractor must perform a bat survey in accordance with the U.S. Fish and Wildlife Service.

B. All costs for the completion of this work, including any potential bat survey, will be considered incidental to the completion of the work.

C. Clearing shall include the disposal of all felled trees laying on the ground.

D. The limits of tree clearing shall be kept to the minimum amount necessary for construction access and to perform the "work". The contractor shall protect existing trees on project site which are not required to be removed.

3.2 GRUBBING

A. The contractor shall perform grubbing only to the extent necessary to perform work required.

B. Grubbing within construction limits shall be strictly adhered to.

C. Grubbing:
   1. Remove and dispose of roots larger the 3 inches in diameter, matted roots and stumps from construction limits.
   2. Backfill all excavated depressions with soil brought in from off-site and grade to drain.
   3. Stumps to be removed from site and disposed of.
   4. Grub out stumps and roots to not less than one foot below subgrade surface.
   5. Grub out visible rock fragments and boulders, greater than 6 inches in greatest dimension.

3.3 SCALPING

A. The contractor is to scalp all areas where excavation or embankment is to be performed. Scalping shall include the removal of surface material such as sod, grass, residue of agricultural crops, sawdust and any other vegetative matter without removing more earth than is necessary.

3.4 WETLANDS

A. Clearing and grubbing is not required within the existing wetlands for the limits of permanent construction. Any clearing and grubbing performed for construction access shall be done in accordance with the general notes on sheet G-101 and in accordance with sheets S-120 and S-121.

3.5 REMOVAL AND DISPOSAL

A. Mulching of trees and larger grubbed material will be allowed.
   1. At the Contractor's option, mulch may be used and incorporated into temporary erosion control measures and included in the Contractors Stormwater Pollution Prevention Plan (SWPPP). Once construction is completed, this mulch shall be removed and disposed of off-site.
   2. At the Constractor's option, mulch may be incorporated into the Embankment Topsoil as described in Section 312410.

B. Burning of cleared and grubbed material will not be allowed on-site.

C. Remove and dispose of all material off site. Disposal shall be in accordance with MoDNR or local regulation and shall comply with all applicable laws and regulation.

3.6 FINISHED SURFACE

A. Leave ground surface in condition suitable for grading or placing embankment.

3.7 ACCEPTANCE

A. Upon completion of the site grubbing, obtain owner's representatives acceptance of the depth of grubbing and rough grade.

END OF SECTION 311000

SECTION 312410 – EMBANKMENT IN PLACE

PART 1 – GENERAL

1.1 SCOPE

A. The work under this section consists of furnishing and transporting material from contractor provided source, placing and forming embankments, compacting embankment or for adding or reducing the water content of the embankment, any excavation required to provide the embankment material included under the item of embankment in place, any other work noted on the plans.

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this section.

B. Related work specified elsewhere:
1. Section 014535 – Special Inspections
2. Section 311000 - Clearing and Grubbing
2. Section 312300 - Excavation and Fill
3. Section 321540.1 – 1 ½" Minus Crushed Stone Base Rock
4. Section 329219 - Native Seeding

1.3 SUBMITTALS

A. The below product data shall be submitted for review and approval prior to placement of embankment fill.

1. Location of borrow site.
2. Soil classification per ASTM D 2487
3. Completed degree of compaction (soil proctor) per ASTM D 698.

1.4 QUALITY ASSURANCE

A. The Contractor shall be responsible for conducting soil sampling, testing, and laboratory analysis of the proposed embankment fill to determine the appropriate degree of compaction (soil proctor) to be used in field density testing. The Contractor shall retain the services of an independent geotechnical engineer or construction materials testing firm as needed to complete the material testing as outlined below in Table 312410.1.

B. The Contractor shall be responsible for sourcing, testing, and providing an approved earth fill and soil proctor, as approved by their independent consultant, to the Owner or Owners representative for their review and approval.

Table 312410.1

Material	Test Required Test/Sample	Frequency
Embankment in Place	Classification according to ASTM D 2487	Per borrow site

C. The Owner will provide construction materials testing personnel to complete the field density testing for conformance with the submitted and approved completed degree of compaction (soil proctor) as outlined below in Table 312410.2. The Contractor will be responsible for coordinating and scheduling the frequency of testing with the Owner and Owners representative.

Table 312410.2

Material	Test Required Test/Sample	Frequency
Embankment in Place	ASTM D 698 Standard Test Method for Laboratory compaction characteristics of soil using standard effect	1 test/8" lift 500 foot placed

PART 2 – PRODUCTS

2.1 EMBANKMENT IN PLACE

A. General: Provide approved borrow soil materials for use as Embankment in Place.

B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487 or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487 or a combination of these groups.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

D. Where Embankment in Place is within 8 inches of side slope graded topsoil shall be used and compacted to allow plantings. See 329219 - Native Seeding.

2.2 TOPSOIL

A. Topsoil shall be a fertile, friable and loamy soil of uniform quality, without admixture of subsoil material, and shall be free from material such as hard clods, stiff clay, hardpan, partially disintegrated stone, pebbles larger than one inch in diameter and other impurities.

B. Topsoil shall be relatively free from grass, roots, weeds and other objectionable plant material or vegetative debris undesirable or harmful to plant life or which will prevent the formation of a suitable seedbed.

1. At the Contractors option, on-site mulch from cleared and grubbed material may be incorporated into the 8 inches of compacted topsoil for the embankment side slopes at a rate not exceeding 25% of the topsoil mixture.

PART 3 – EXECUTION

3.1 PREPARATION

A. Preserve in operating condition active utilities traversing site.

B. Clear and Grub the site in accordance with Section 311000 – Clearing and Grubbing.

C. After clearing and grubbing is completed the Contractor shall remove the top 6" of existing soil within the limits of the embankments prior to placing and compacting the embankments. Once the top 6" of existing soil is removed the existing subgrade shall be inspected and approved by the Owner or Owners representative. Any areas of soft or unsuitable subgrade shall be removed and replaced with approved earth fill (Embankment).

D. Subgrade shall be reasonably free of water prior to placement of Embankment. Do not place embankment on loose or frozen subgrade.

3.2 PLACING EMBANKMENT

A. The embankment shall conform to the elevations and dimensions shown on the plans.

B. Embankment construction shall consist of constructing embankments, including preparation of the area upon which the embankment is to be placed, placing and compacting approved earth fill material within embankment areas where unsuitable material has been removed, and placing and compacting embankment material in holes, pits and other depressions within the embankment area. Only approved material free of trees, stumps, rubbish and any other deleterious material shall be used in the construction of embankments and backfills.

C. Trail embankment shall be placed in layers not exceeding 8 inches, an uncompacted measurement, and shall be compacted as specified before the next layer is placed. The layers shall be placed approximately parallel to both the proposed profile grade and to the finished trailbed. Effective spreading equipment shall be used on each lift to obtain uniform thickness prior to compacting. Continuous leveling and manipulating will be required during compacting operations. Construction equipment shall be routed uniformly over the entire surface of each layer.

D. Where new embankment is to be constructed against the existing railbed embankment, existing slopes steeper than six horizontal to one vertical measured at a right angle to the trail shall be continuously benched in no less than 8-inch rises over those areas as required, as the work is brought up in layers. Benching shall be of sufficient width to permit placing and compacting operations. Each horizontal cut shall begin at the intersection of the ground line and the vertical side of the previous bench. The material thus cut out or compacted along with the new embankment material will be at the contractor's expense.

3.3 COMPACTING EMBANKMENT

A. Ensure there is adequate moisture in the embankment during placing, shaping, and compacting to prevent segregation and achieve adequate compaction. Moisture condition embankment as necessary to achieve required density as determined by ASTM D698.

B. The material shall be compacted to meet the following:

1.	Test Method to determine maximum density and moisture	ASTM D698
2.	Relative compaction relative to the optimum	95%

3. Moisture content relative to the optimum -2% to +2%

3.4 EMBANKMENT APPROVAL / PROOF ROLLING

A. Prior to placing any 1½" Minus Crushed Stone Base Rock, an inspection of the Embankment shall be performed by proof rolling within the limits of the trail base.

B. To complete proof rolling, the entire embankment shall be provided with a relatively smooth surface, suitable for observing soil reaction during proof rolling.

C. Contractor shall schedule and provide a fully loaded tri-axle dump truck for proof rolling. Loaded truck shall have a minimum gross operating weight of 25 tons.

D. Proof rolling shall be completed in a series of traverses parallel to the centerline of the trail at a speed of 5 mph or less.

E. Soft areas, yielding areas, cracked areas, or areas where rolling or waving is observed shall be considered indicative of an unsatisfactory subgrade and shall be removed and replaced at the Contractor's expense.

F. Once the Embankment subgrade has been proof rolled and approved, the Contractor shall protect the subgrade from becoming saturated, frozen, or adversely altered until the crushed stone base course has been installed.

END OF SECTION 312410