

**AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES**

THIS AGREEMENT is made and entered into effective the 12th day of April, 2021 by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and AECOM Technical Services, Inc. (hereinafter referred to as "CONSULTANT").

RECITALS

WHEREAS, CITY desires to obtain professional engineering services for the design of plans and general construction contract documents for BNSF Blackstone McKinley Grade Separation Project hereinafter referred to as the "Project;" and

WHEREAS, CONSULTANT is engaged in the business of furnishing services as an engineering firm and hereby represents that it desires to and is professionally and legally capable of performing the services called for by this Agreement; and

WHEREAS, CONSULTANT acknowledges that this Agreement is subject to the requirements of Fresno Municipal Code Section 4-107 and Administrative Order No. 6-19; and

WHEREAS, this Agreement will be administered for CITY by its Public Works Department Director (hereinafter referred to as "Director") or his/her designee.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and promises hereinafter contained to be kept and performed by the respective parties, it is mutually agreed as follows:

1. Scope of Services. CONSULTANT shall perform the services described herein and in **Exhibit A** to complete the Project more fully described in **Exhibit A**, and this shall include all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**. A separate Notice to Proceed will be issued for each of the Deliverable Tasks. The term "Deliverable Task" used herein shall mean CONSULTANT'S work product developed for and provided to the CITY in the course of performing under the AGREEMENT or agreed to be provided to the CITY under the AGREEMENT by the CONSULTANT, its directors, officers, employees, agents, partners, affiliates, or subconsultants, as further defined to be any services, any and all concepts, drawings, maps, plans, diagrams, designs, estimates, pictures, data specification, reports, techniques, ideas, information, documentation and other materials, however recorded, developed or provided but not limited by the work product described in **Exhibit A**; resulting from the services that are provided by CONSULTANT to CITY during the course of CONSULTANT'S performance of the AGREEMENT.

CITY may, at its discretion, issue concurrent Notice's to Proceed, allowing CONSULTANT to perform concurrent Deliverable Tasks. By entry into this Agreement and upon CITY'S issuance of a written "Notice to Proceed," CITY contracts for the services in the first Deliverable Task. CONSULTANT shall not perform any other Deliverable Task of the Agreement, and this Agreement shall not be a contract for any other Deliverable Task, until further performance is authorized by CITY'S issuance of a written "Notice to Proceed." It shall, however, remain CONSULTANT'S offer to perform all Deliverable Tasks described herein. In the event CONSULTANT performs services without CITY'S prior written authorization, CONSULTANT will not be entitled to compensation for such services.

(a) The scope of work to be performed by the Consultant is defined in **Exhibit A**. Exhibit A also identifies those portions of the scope of work that shall be performed by the City.

(b) CONSULTANT shall conduct studies and investigations as necessary to confirm requirements of design including, but not limited to, (i) consulting with the various utility agencies, and (ii) obtaining all information and data from the respective responsible CITY department/division that is available in CITY'S records and is required by CONSULTANT in connection with the consulting services including, but not limited to, maps, surveys, reports, information, restrictions and easements. CONSULTANT shall notify CITY if a topographic survey is required.

(c) CONSULTANT shall provide a preliminary evaluation of the Project taking into consideration CITY'S estimate of the cost of construction ("Construction Budget") of Forty Seven Million Five Hundred Seventy Seven Thousand Five Hundred Forty One Dollars (\$47,577,541.000), including alternative approaches to design and construction of the Project.

(d) Based upon the mutually agreed upon Project requirements and any adjustments authorized by CITY in the Construction Budget, CONSULTANT shall design and prepare schematic design drawings and other documents for review, modification, if required, and acceptance by CITY staff sufficient to show the concept and scope of the proposed Project and the scale and relationship of Project components.

(e) CONSULTANT shall submit a preliminary estimate of construction cost for review and acceptance by CITY. As used herein, "construction cost" means the cost of construction under the general construction contract and does not include CONSULTANT'S compensation as herein provided. Such estimate shall include, and shall separately state, the cost of any add or deduct alternatives, the cost of any work which may be let on a segregated bid basis and any equipment or fixtures which may be incorporated in or excluded from the general construction contract as may be necessary to stay within the Construction Budget.

(h) CONSULTANT shall make as many submittals as may be necessary or desirable to obtain the acceptance by CITY and shall assist CITY in applying for and obtaining from applicable public agencies any approval permit, or waiver required by law, which assistance shall include, but not be limited to, making Project information available to CITY.

(i) CONSULTANT may not rely upon any as-builts provided by CITY, but shall investigate the existing conditions and ascertain the adequacy of such as-builts for CONSULTANT'S design. CONSULTANT shall bring to CITY'S attention any discrepancies in the as-builts that are discovered by CONSULTANT. CITY makes no representations regarding any as-builts.

(f) CONSULTANT shall submit a revised estimate of construction cost for review and acceptance by CITY. The revised estimates shall include, but shall separately state, the cost of any add or deduct alternates, any work which may be let on a segregated bid basis, and any furnishings, equipment or fixtures which may be incorporated in or excluded from the general construction contract as may be necessary to stay within the Construction Budget, including authorized revisions thereto.

(g) In the event that the revised estimates of construction cost exceeds the preliminary estimate of construction cost previously accepted, excluding therefrom any add alternate, any work which may be let on a segregated bid basis and any furnishing, equipment or fixtures which were identified in previous estimates as that which may be excluded from the general construction contract, CITY shall have the option of accepting or rejecting the revised estimates and CONSULTANT shall, at no additional cost to CITY, make such design changes as may be necessary to reduce the revised estimate so that it shall not exceed the preliminary estimate of construction cost previously accepted by CITY. CITY shall not increase the scope of the Project except by modification of this Agreement which shall include an agreed upon increase in CONSULTANT'S compensation.

(j) CONSULTANT shall prepare from the accepted preliminary design documents, detailed plans and specifications setting forth the complete work to be done, and the materials, workmanship, finishes and equipment, fixtures, and site work required. CONSULTANT shall also prepare necessary bidding information, general and special conditions of the general construction contract, technical specifications of the general construction contract, and the bid proposal and general construction contract forms. Such documents shall be subject to the review and acceptance by CITY. CONSULTANT shall cooperate with, assist and be responsive to CITY'S Purchasing Manager in preparation of all documents including, without limitation, slip-sheeting final documents for printing when requested. CITY'S Standard Specifications must be used by CONSULTANT where possible. Final drawings shall be drawn, printed or reproduced by a process providing a permanent record in black on mylar. Bid, general conditions, contract and bond document forms or formats regularly used by CITY shall be used by CONSULTANT unless the Director determines they would be impractical for this Project. CONSULTANT shall be responsible for assuring that the special conditions, technical specifications and any other documents prepared by CONSULTANT are consistent with any documents regularly used by CITY that are used for this Project.

(k) Upon request of CITY, CONSULTANT shall provide the calculations used to determine the general construction contract quantities; and structural calculations for the purpose of obtaining any building permits.

(l) CONSULTANT shall make as many submittals as may be necessary or desirable to obtain the acceptance by CITY and shall assist CITY in applying for and obtaining from applicable public agencies any approval, permit, report, statement, or waiver required by law, which assistance shall include, but not be limited to, making Project information available to CITY.

(m) CONSULTANT shall provide CITY with sets of completed plans and sets of completed specifications for review and acceptance by CITY with each Deliverable Task as described in Exhibit A. Should the plans and specifications as submitted by CONSULTANT not be accepted by CITY, CONSULTANT shall revise the plans and specifications as needed to obtain final acceptance at no additional cost to CITY.

(n) After acceptance of final corrections, CONSULTANT shall provide CITY with one set of accepted reproducible tracings and bid documents for the Project. In addition, CONSULTANT shall provide CITY with one complete set of CAD/System disk files of drawings and complete disk files of specifications in the following format: AutoCAD 2018 for the Plans and Word 2016 .

(o) CONSULTANT shall submit a final estimate of construction cost for review and acceptance by CITY. Such estimate shall be calculated as of the date all general construction contract documents are delivered to CITY in final form ready for reproduction and advertising. Such estimate shall include, but shall separately state, the cost of any add or deduct alternates, any work which may be let on a segregated basis, and any equipment, or fixtures which may be incorporated in or excluded from the general construction contract.

(p) In the event that the final estimate of construction cost exceeds the revised estimate of construction cost previously accepted, excluding therefrom any add alternate, any work which may be let on a segregated bid basis and any furnishings, equipment or fixtures which was identified in the previously accepted estimates as that which may be excluded from the general construction contract, CITY shall have the option of accepting or rejecting the final estimate. If CITY elects to reject the final estimate, CONSULTANT shall at no additional cost to CITY, make such design changes as may be necessary to reduce the final estimate so that it shall not exceed the revised estimate of construction cost previously accepted by CITY.

(q) Services shall be undertaken and completed in a sequence assuring expeditious completion. All services shall be rendered and deliverables submitted within the specified calendar days for each Deliverable Task described within Exhibit A from the issuance of a Notice to Proceed for each Deliverable Task unless an extension of time is approved in writing by the Director. Re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within the specified calendar days in Exhibit A from receipt of CITY'S comments unless an extension of time is approved in writing by the Director.

(r) CONSULTANT shall assist CITY in obtaining bids. CONSULTANT shall not communicate with potential bidders regarding this Project without the express prior written authorization of CITY'S Purchasing Manager.

(s) CONSULTANT shall, within 7 calendar days of any request by CITY, expeditiously draft and promptly provide addendum as determined by CITY to be reasonable or necessary for the bidding process.

(t) If the lowest responsible bid received for the general construction contract exceeds by 10% or more the final estimate of construction cost previously accepted by CITY, excluding therefrom any add alternate, any work which may be let on a segregated bid basis and any furnishings, equipment or fixtures which are excluded from the general construction contract, CONSULTANT shall, within 14 calendar days or as otherwise mutually agreed of any request by CITY, revise the plans and specifications as may be necessary to stay within 10% of such final estimate of construction cost, at no additional cost to CITY provided such bid is received within 180 calendar days after completion of services in this Agreement. CONSULTANT shall also submit such revised plans and specifications, together with a new final estimate of construction cost, to CITY Design Services for review and acceptance. This procedure, using the latest accepted final estimate of construction cost, shall, upon written notice to CONSULTANT from the Director, be repeated until an acceptable bid is received that does not exceed the accepted final estimate of construction cost by more than 10%.

(u) CONSULTANT shall attend the pre-bid and pre-construction conferences and, if called upon by CITY, act on CITY'S behalf in discussing the various aspects of the construction phase.

(v) CONSULTANT shall review and recommend in writing to CITY acceptance or non-acceptance of shop drawings, equipment and material submittals of the general construction contractor as required by the general construction contract and applicable laws and regulations in a timely manner. The period for CONSULTANT review shall be as specified in the general construction contract, except if such period is not so specified, the period shall be as determined in the pre-construction conference as mutually agreed upon by CITY, CONSULTANT and the general construction contractor.

(w) CONSULTANT shall, at intervals appropriate to the state of construction, familiarize itself with the progress and quality of the work and determine in general if the work is proceeding in accordance with the general construction contract documents, and keep CITY informed of the progress of the work. In the event that CONSULTANT'S visit to the site results in the discovery of any defect or deficiencies in the work of the general construction contractor, CONSULTANT shall immediately advise CITY and document, in writing, the work CONSULTANT deems substandard, and make recommendations where appropriate to reject any work not conforming to the intended design or specifications. Based on CONSULTANT'S best knowledge, information and belief, CONSULTANT shall provide CITY a general written assurance that the work covered by a payment application meets the standards in the general construction contract. As to technical aspects, CONSULTANT shall provide a written judgment of the acceptability of the work for payment applications and final acceptance, subject to CITY'S right to overrule CONSULTANT.

(x) Upon written request by CITY, CONSULTANT shall render interpretations of the general construction contract documents necessary for the proper execution or progress of the work.

(y) Upon written request by CITY, CONSULTANT shall render written recommendations on change orders, claims, disputes or other questions arising out of the general construction contract, in a timely manner. Recommendations by CONSULTANT in favor of a change order that is consequently accepted by CITY shall constitute approval by CONSULTANT who shall then approve the change order in writing. CONSULTANT

shall not unreasonably withhold written approval in the event CITY accepts a change order that CONSULTANT recommended to be rejected. In the event of any technical disputes, CONSULTANT shall provide CITY with CONSULTANT'S written interpretation of the contract documents. The period for CONSULTANT review shall be as specified in the general construction contract, except if such period is not so specified, the period shall be as determined in the pre-construction conference as mutually agreed upon by CITY, CONSULTANT and the general construction contractor. If CITY, CONSULTANT and the respective general construction contractor are unable to mutually agree on such period for CONSULTANT review, then CITY will make the determination and that determination will be final.

(z) Upon written request by CITY, CONSULTANT shall provide such design and specification services as may be requested by CITY to implement change orders necessary for clarification or interpretation of the general construction contract documents or which may have resulted from errors or omissions by CONSULTANT.

(aa) Where change orders arise as a result of an increase in the scope of work or are due to unforeseeable conditions, the parties may modify this Agreement, which modification shall include an agreed upon increase in CONSULTANT'S compensation.

(bb) Upon written request of CITY, CONSULTANT shall assist CITY in the preparation of Progress Payment Estimates and other related construction reports.

(cc) CONSULTANT shall provide CITY with two sets of original as-grade plans wet-stamped and signed by the CONSULTANT'S Engineer of Record for the Project submitted for final approval by the CITY'S Building and Safety Services Division of the Planning and Development Department on all projects located outside the Right of Way.

(dd) CONSULTANT shall prepare Record Drawings by updating the accepted Final construction documents to reflect all changes or deviations that occurred during construction as reflected on or from each of the following: (i) the general construction contractor provided red-lined plans, (ii) those furnished by the CITY, (iii) CONSULTANT provided Request for Information responses, and (iv) any CONSULTANT bulletins, amendments or clarifications. CONSULTANT shall provide CITY with one set of Mylars Record Drawings for the Project within 90 calendar days from receipt of red-lined field markups unless an extension of time is approved in writing by the Director. Re-submittals, as necessary to obtain the acceptance by CITY, shall be submitted to CITY within 14 calendar days from receipt of CITY comments unless an extension of time is approved in writing by the Director. In addition, CONSULTANT shall provide CITY with one complete set of CAD/System disk files of Record Drawings in the following format: AutoCAD 2018 for the Plans and Word 2016.

2. CITY'S responsibilities. CITY will:

(a) Provide the Scope of Services identified as City Provided (and or Responsibility) as defined in Exhibit A. It is mutually agreed that any delays in City Provided Services shall cause an adjustment to the Consultant time durations defined herein and in Exhibit A.

(b) Provide, upon request and cooperation of CONSULTANT, access to, and make all provisions necessary to, enter upon public or private lands as required for CONSULTANT to perform such services and inspections as are required in development of the Project; provided, however, if CITY is unable to obtain access to enter upon public or private lands, CONSULTANT shall not be relieved from performing its services as to those public and private lands that are accessible.

(b) Manage and be responsible for all negotiations with owners in connection with land or easement acquisition and provide all required title reports and appraisals.

(c) With the exception of preparing correspondence required for design, hold all required special meetings, serve all public and private notices, receive and act upon all protests, and perform all services customarily performed by owners as are necessary for the orderly progress of the work and the successful completion of the Project, and pay all costs incidental thereto.

(e) Conduct onsite inspection during construction to check quality and quantity of work as conditions warrant and be responsible for assuring that the general construction contractor carries out all construction work in accordance with the plans and specifications. However, this does not release CONSULTANT from its responsibility to make periodic site visits under Section 1(e) for the purpose of observing the work to determine its general conformity with the plans and specifications and reporting its findings to CITY.

(f) Prepare all change orders during construction in cooperation with CONSULTANT.

(g) Prepare all Progress Payment Estimates in cooperation with CONSULTANT following its general assurance that the work covered by a payment application meets the standards in the general construction contract documents based upon CONSULTANT'S best knowledge, information and belief.

(h) Pay, or cause to be paid, plan check fees, conditional use permit fees and site plan review fees.

(i) Arrange for and pay, or cause to be paid, any fees associated with Environmental Impact Reports or Statements.

(j) Give reasonably prompt consideration to all matters submitted by CONSULTANT for acceptance to the end that there will be no substantial delays in CONSULTANT'S program of work. For an acceptance, approval, authorization, a request or any direction to CONSULTANT to be binding upon CITY under the terms of this Agreement, such acceptance, approval, authorization, request or direction must be in writing, duly authorized by CITY and signed on behalf of CITY by the Director.

3. Compensation.

(a) CONSULTANT'S sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee of Six Million Four Hundred Eighty Three Thousand Seven Hundred Eighty Six Dollars and Twenty Three Cents (\$6,483,786.23), and a contingency amount not to exceed Three Hundred Twenty Five Thousand Dollars (\$325,000) for any additional work rendered pursuant to Subsection (d) below and authorized in writing by the Director. Such fees include all expenses incurred by CONSULTANT in performance of such services.

(b) Detailed statements shall be rendered monthly and will be payable in the normal course of CITY business. Such statements shall be for an amount no greater than the cumulative budget attributable to all City authorized Deliverable Tasks as provided in Exhibit A. It is mutually agreed that the Consultant will not be limited to the budget assigned to each individual Deliverable Task, however, statements will not exceed the total cumulative budget for all Deliverables Tasks authorized to date. Statements shall provide a breakdown of costs by Deliverable Task. If funds need to be moved from one task to another it shall be with City's concurrence and shall be noted on the statement when such a transfer occurs.

(d) The parties may modify this Agreement to increase or decrease the scope of services or provide for the rendition of services not required by this Agreement, which modification shall include an adjustment to CONSULTANT'S compensation. Any change in the scope of services must be made by written amendment to the Agreement signed by an authorized representative for each party. CONSULTANT shall not be entitled to any additional compensation if services are performed prior to a signed written amendment.

4. Termination, Remedies, Force Majeure, and Consolidation of Disputes.

(a) This Agreement shall terminate without any liability of CITY to CONSULTANT upon the earlier of: (i) CONSULTANT'S filing for protection under the federal bankruptcy laws, or any bankruptcy petition or petition for receiver commenced by a third party against CONSULTANT; (ii) 7 calendar days prior written notice with or without cause by CITY to CONSULTANT; (iii) CITY'S non-appropriation of funds sufficient to meet its obligations hereunder during any CITY fiscal year of this Agreement, or insufficient funding for the Project; or (iv) expiration of this Agreement.

(b) Immediately upon any termination or expiration of this Agreement, CONSULTANT shall (i) immediately stop all work hereunder; (ii) immediately cause any and all of its subcontractors to cease work; and (iii) return to CITY any and all unearned payments and all properties and materials in the possession of CONSULTANT that are owned by CITY. Subject to the terms of this Agreement, CONSULTANT shall be paid compensation for services satisfactorily performed prior to the effective date of termination. CONSULTANT shall not be paid for any work or services performed or costs incurred which reasonably could have been avoided.

(c) In the event of termination due to failure of CONSULTANT to satisfactorily perform in accordance with the terms of this Agreement, CITY may withhold an amount that would otherwise be payable as an offset to, but not in excess of, CITY'S damages caused by such failure. In no event shall any payment by CITY pursuant to this Agreement constitute a waiver by CITY of any breach of this Agreement which may then exist on the part of CONSULTANT, nor shall such payment impair or prejudice any remedy available to CITY with respect to the breach.

(d) Upon any breach of this Agreement by CONSULTANT, CITY may (i) exercise any right, remedy (in contract, law or equity), or privilege which may be available to it under applicable laws of the State of California or any other applicable law; (ii) proceed by appropriate court action to enforce the terms of the Agreement; and/or (iii) recover all direct, indirect, consequential, economic and incidental damages for the breach of the Agreement. If it is determined that CITY improperly terminated this Agreement for default, such termination shall be deemed a termination for convenience.

(e) CONSULTANT shall provide CITY with adequate written assurances of future performance, upon the request of the Director or his/her designee, in the event CONSULTANT fails to comply with any terms or conditions of this Agreement.

(f) CONSULTANT shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of CONSULTANT and without its fault or negligence such as, acts of God or the public enemy, acts of CITY in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. CONSULTANT shall notify the Director or his/her designee in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, and shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Director or his/her designee of the cessation of such occurrence.

(g) CONSULTANT agrees that, notwithstanding any contrary provision in this Agreement, any dispute arising from or relating to this Agreement (including, without limitation, disputes based on contract, tort, equity or statute) may, at CITY'S option, be joined and consolidated with any other dispute or disputes arising from or relating to the Project so that all disputes arising from or relating to the Project may be resolved in a single proceeding. CONSULTANT hereby specifically waives any objection it may otherwise have to such joinder and consolidation and specifically consents to mediation, arbitration or any other dispute resolution mechanism, forum or proceeding necessary to effectuate the joinder and consolidation contemplated by this provision.

5. Confidential Information, Ownership of Documents and Copyright License.

(a) Any reports, information, or other data prepared or assembled by CONSULTANT pursuant to this Agreement shall not be made available to any individual or organization by CONSULTANT without the prior written approval of CITY. During the term of this Agreement, and thereafter, CONSULTANT shall not, without the prior written consent of CITY, disclose to anyone any Confidential Information. The term Confidential Information for the purposes of this Agreement shall include all proprietary and confidential information of CITY, including but not limited to business plans, marketing plans, financial information, designs, drawings, specifications, materials, compilations, documents, instruments, models, source or object codes and other information disclosed or submitted, orally, in writing, or by any other medium or media. All Confidential Information shall be and remain confidential and proprietary in CITY.

(b) Any and all original sketches, pencil tracings of working drawings, plans, computations, specifications, computer disk files, writings and other documents prepared or provided by CONSULTANT pursuant to this Agreement are the property of CITY at the time of preparation and shall be turned over to CITY upon expiration or termination of the Agreement or

default by CONSULTANT. CONSULTANT grants CITY a copyright license to use such drawings and writings. CONSULTANT shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein. CITY may modify the design including any drawings or writings. Any use by CITY of the aforesaid sketches, tracings, plans, computations, specifications, computer disk files, writings and other documents in completed form as to other projects or extensions of this Project, or in uncompleted form, without specific written verification by CONSULTANT will be at CITY'S sole risk and without liability or legal exposure to CONSULTANT. CONSULTANT may keep a copy of all drawings and specifications for its sole and exclusive use.

(c) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 5.

(d) This Section 5 shall survive expiration or termination of this Agreement.

6. Professional Skill. It is further mutually understood and agreed by and between the parties hereto that inasmuch as CONSULTANT represents to CITY that CONSULTANT and its subcontractors, if any, are skilled in the profession and shall perform in accordance with the standards of said profession necessary to perform the services agreed to be done by it under this Agreement, CITY relies upon the skill of CONSULTANT and any subcontractors to do and perform such services in a skillful manner and CONSULTANT agrees to thus perform the services and require the same of any subcontractors. Therefore, any acceptance of such services by CITY shall not operate as a release of CONSULTANT or any subcontractors from said professional standards.

7. Indemnification. To the furthest extent allowed by law including California Civil Code section 2782, CONSULTANT shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, CONSULTANT or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. CONSULTANT'S obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If CONSULTANT should subcontract all or any portion of the work to be performed under this Contract, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

CONSULTANT is responsible for any and all insurance and indemnification required by BNSF. If CONSULTANT should subcontract all or any portion of the work performed under this Contract, CONSULTANT shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

8. Insurance.

(a) Throughout the life of this Agreement, CONSULTANT shall pay for and maintain in full force and effect all insurance as required in **Exhibit B**, which is incorporated into and part of this Agreement, with an insurance company(ies) either (i) admitted by the California Insurance Commissioner to do business in the State of California and rated no less than "A-VII" in the Best's Insurance Rating Guide, or (ii) as may be authorized in writing by CITY'S Risk Manager or his/her designee at any time and in his/her sole discretion. The required policies of insurance as stated in Exhibit B shall maintain limits of liability of not less than those amounts stated therein. However, the insurance limits available to CITY, its officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified therein or the full limit of any insurance proceeds to the named insured.

(b) If at any time during the life of the Agreement or any extension, CONSULTANT or any of its subcontractors/sub-consultants fail to maintain any required insurance in full force and effect, all services and work under this Agreement shall be discontinued immediately, and all payments due or that become due to CONSULTANT shall be withheld until notice is received by CITY that the required insurance has been restored to full force and effect and that the premiums therefore have been paid for a period satisfactory to CITY. Any failure to maintain the required insurance shall be sufficient cause for CITY to terminate this Agreement. No action taken by CITY pursuant to this section shall in any way relieve CONSULTANT of its responsibilities under this Agreement. The phrase "fail to maintain any required insurance" shall include, without limitation, notification received by CITY that an insurer has commenced proceedings, or has had proceedings commenced against it, indicating that the insurer is insolvent.

(c) The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The duty to indemnify CITY shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

(d) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor/sub-consultant to provide insurance protection, as an additional insured, to the CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of this section, except that any required certificates and applicable endorsements shall be on file with CONSULTANT and CITY prior to the commencement of any services by the subcontractor. CONSULTANT and any subcontractor/sub-consultant shall establish additional insured status for CITY, its officers, officials, employees, agents and volunteers by using Insurance Service Office (ISO) Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.

9. Conflict of Interest and Non-Solicitation.

(a) Prior to CITY'S execution of this Agreement, CONSULTANT shall complete a City of Fresno conflict of interest disclosure statement in the form as set forth in **Exhibit C**.

During the term of this Agreement, CONSULTANT shall have the obligation and duty to immediately notify CITY in writing of any change to the information provided by CONSULTANT in such statement.

(b) CONSULTANT shall comply, and require its subcontractors to comply, with all applicable (i) professional canons and requirements governing avoidance of impermissible client conflicts; and (ii) federal, state and local conflict of interest laws and regulations including, without limitation, California Government Code Section 1090 et. seq., the California Political Reform Act (California Government Code Section 87100 et. seq.), the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations Section 18700 et. seq.) and Section 4-112 of the Fresno Municipal Code (Ineligibility to Compete). At any time, upon written request of CITY, CONSULTANT shall provide a written opinion of its legal counsel and that of any subcontractor that, after a due diligent inquiry, CONSULTANT and the respective subcontractor(s) are in full compliance with all laws and regulations. CONSULTANT shall take, and require its subcontractors to take, reasonable steps to avoid any appearance of a conflict of interest. Upon discovery of any facts giving rise to the appearance of a conflict of interest, CONSULTANT shall immediately notify CITY of these facts in writing.

(c) In performing the work or services to be provided hereunder, CONSULTANT shall not employ or retain the services of any person while such person either is employed by CITY or is a member of any CITY council, commission, board, committee, or similar CITY body. This requirement may be waived in writing by the City Manager, if no actual or potential conflict is involved.

(d) CONSULTANT represents and warrants that it has not paid or agreed to pay any compensation, contingent or otherwise, direct or indirect, to solicit or procure this Agreement or any rights/benefits hereunder.

(e) Neither CONSULTANT, nor any of CONSULTANT'S subcontractors performing any services on this Project, shall bid for, assist anyone in the preparation of a bid for, or perform any services pursuant to, any other contract in connection with this Project. CONSULTANT and any of its subcontractors shall have no interest, direct or indirect, in any other contract with a third party in connection with this Project unless such interest is in accordance with all applicable law and fully disclosed to and approved by the City Manager, in advance and in writing.

(f) If CONSULTANT should subcontract all or any portion of the work to be performed or services to be provided under this Agreement, CONSULTANT shall include the provisions of this Section 9 in each subcontract and require its subcontractors to comply therewith.

(g) This Section 9 shall survive expiration or termination of this Agreement.

10. Recycling Program. In the event CONSULTANT maintains an office or operates a facility(ies), or is required herein to maintain or operate same, within the incorporated limits of the City of Fresno, CONSULTANT at its sole cost and expense shall:

(i) Immediately establish and maintain a viable and ongoing recycling program, approved by CITY'S Solid Waste Management Division, for each office and facility. Literature describing CITY recycling programs is available from CITY'S

Solid Waste Management Division and by calling City of Fresno Recycling Hotline at (559) 621-1111.

- (ii) Immediately contact CITY'S Solid Waste Management Division at (559) 621-1452 and schedule a free waste audit, and cooperate with such Division in their conduct of the audit for each office and facility.
- (iii) Cooperate with and demonstrate to the satisfaction of CITY'S Solid Waste Management Division the establishment of the recycling program in paragraph (i) above and the ongoing maintenance thereof.

11. General Terms.

(a) Except as otherwise provided by law, all notices expressly required of CITY within the body of this Agreement, and not otherwise specifically provided for, shall be effective only if signed by the Director or his/her designee.

(b) Records of CONSULTANT'S expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to CITY or its authorized representatives upon request during regular business hours throughout the life of this Agreement and for a period of three years after final payment or, if longer, for any period required by law. In addition, all books, documents, papers, and records of CONSULTANT pertaining to the Project shall be available for the purpose of making audits, examinations, excerpts, and transcriptions for the same period of time. If any litigation, claim, negotiations, audit or other action is commenced before the expiration of said time period, all records shall be retained and made available to CITY until such action is resolved, or until the end of said time period whichever shall later occur. If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this paragraph. This Section 11(b) shall survive expiration or termination of this Agreement.

(c) Prior to execution of this Agreement by CITY, CONSULTANT shall have provided evidence to CITY that CONSULTANT is licensed to perform the services called for by this Agreement (or that no license is required). If CONSULTANT should subcontract all or any portion of the work or services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide evidence to CITY that subcontractor is licensed to perform the services called for by this Agreement (or that no license is required) before beginning work.

(d) CONSULTANT'S services pursuant to this Agreement shall be provided under the supervision of Richard Stockton, and he/she shall not assign another to supervise CONSULTANT'S performance of this Agreement without the prior written approval of the Director.

12. Nondiscrimination. To the extent required by controlling federal, state and local law, CONSULTANT shall not employ discriminatory practices in the provision of services, employment of personnel, or in any other respect on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Subject to the foregoing and during the performance of this Agreement, CONSULTANT agrees as follows:

(a) CONSULTANT will comply with all applicable laws and regulations providing that no person shall, on the grounds of race, religious creed, color, national origin,

ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Agreement.

(b) CONSULTANT will not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. CONSULTANT shall ensure that applicants are employed, and the employees are treated during employment, without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Such requirement shall apply to CONSULTANT'S employment practices including, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

(c) CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT in pursuit hereof, state that all qualified applicants will receive consideration for employment without regard to race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era.

(d) CONSULTANT will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising such labor union or workers' representatives of CONSULTANT'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(e) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 12.

13. Independent Contractor.

(a) In the furnishing of the services provided for herein, CONSULTANT is acting solely as an independent contractor. Neither CONSULTANT, nor any of its officers, agents or employees shall be deemed an officer, agent, employee, joint venturer, partner or associate of CITY for any purpose. CITY shall have no right to control or supervise or direct the manner or method by which CONSULTANT shall perform its work and functions. However, CITY shall retain the right to administer this Agreement so as to verify that CONSULTANT is performing its obligations in accordance with the terms and conditions thereof.

(b) This Agreement does not evidence a partnership or joint venture between CONSULTANT and CITY. CONSULTANT shall have no authority to bind CITY absent CITY'S express written consent. Except to the extent otherwise provided in this Agreement, CONSULTANT shall bear its own costs and expenses in pursuit thereof.

(c) Because of its status as an independent contractor, CONSULTANT and its officers, agents and employees shall have absolutely no right to employment rights and benefits available to CITY employees. CONSULTANT shall be solely liable and responsible for all payroll and tax withholding and for providing to, or on behalf of, its employees all employee benefits including, without limitation, health, welfare and retirement benefits. In addition, together with its other obligations under this Agreement, CONSULTANT shall be solely responsible, indemnify, defend and save CITY harmless from all matters relating to employment and tax withholding for and payment of CONSULTANT'S employees, including, without limitation, (i) compliance with Social Security and unemployment insurance withholding, payment of workers' compensation benefits, and all other laws and regulations governing matters of employee withholding, taxes and payment; and (ii) any claim of right or interest in CITY employment benefits, entitlements, programs and/or funds offered employees of CITY whether arising by reason of any common law, de facto, leased, or co-employee rights or other theory. It is acknowledged that during the term of this Agreement, CONSULTANT may be providing services to others unrelated to CITY or to this Agreement.

14. Notices. Any notice required or intended to be given to either party under the terms of this Agreement shall be in writing and shall be deemed to be duly given if delivered personally, transmitted by facsimile followed by telephone confirmation of receipt, or sent by United States registered or certified mail, with postage prepaid, return receipt requested, addressed to the party to which notice is to be given at the party's address set forth on the signature page of this Agreement or at such other address as the parties may from time to time designate by written notice. Notices served by United States mail in the manner above described shall be deemed sufficiently served or given at the time of the mailing thereof.

15. Binding. Subject to Section 16 below, once this Agreement is signed by all parties, it shall be binding upon, and shall inure to the benefit of, all parties, and each parties' respective heirs, successors, assigns, transferees, agents, servants, employees and representatives.

16. Assignment.

(a) This Agreement is personal to CONSULTANT and there shall be no assignment by CONSULTANT of its rights or obligations under this Agreement without the prior written approval of the City Manager or his/her designee. Any attempted assignment by CONSULTANT, its successors or assigns, shall be null and void unless approved in writing by the City Manager or his/her designee.

(b) CONSULTANT hereby agrees not to assign the payment of any monies due CONSULTANT from CITY under the terms of this Agreement to any other individual(s), corporation(s) or entity(ies). CITY retains the right to pay any and all monies due CONSULTANT directly to CONSULTANT.

17. Compliance With Law. In providing the services required under this Agreement, CONSULTANT shall at all times comply with all applicable laws of the United States, the State of California and CITY, and with all applicable regulations promulgated by federal, state, regional, or local administrative and regulatory agencies, now in force and as they may be enacted, issued, or amended during the term of this Agreement.

18. Waiver. The waiver by either party of a breach by the other of any provision of this Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of either the same or a different provision of this Agreement. No provisions of this Agreement may be

waived unless in writing and signed by all parties to this Agreement. Waiver of any one provision herein shall not be deemed to be a waiver of any other provision herein.

19. Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction. Venue for purposes of the filing of any action regarding the enforcement or interpretation of this Agreement and any rights and duties hereunder shall be Fresno County, California.

20. Headings. The section headings in this Agreement are for convenience and reference only and shall not be construed or held in any way to explain, modify or add to the interpretation or meaning of the provisions of this Agreement.

21. Severability. The provisions of this Agreement are severable. The invalidity, or unenforceability of any one provision in this Agreement shall not affect the other provisions.

22. Interpretation. The parties acknowledge that this Agreement in its final form is the result of the combined efforts of the parties and that, should any provision of this Agreement be found to be ambiguous in any way, such ambiguity shall not be resolved by construing this Agreement in favor of or against either party, but rather by construing the terms in accordance with their generally accepted meaning.

23. Attorney's Fees. If either party is required to commence any proceeding or legal action to enforce or interpret any term, covenant or condition of this Agreement, the prevailing party in such proceeding or action shall be entitled to recover from the other party its reasonable attorney's fees and legal expenses.

24. Exhibits. Each exhibit and attachment referenced in this Agreement is, by the reference, incorporated into and made a part of this Agreement.

25. Precedence of Documents. In the event of any conflict between the body of this Agreement and any Exhibit or Attachment hereto, the terms and conditions of the body of this Agreement shall control and take precedence over the terms and conditions expressed within the Exhibit or Attachment. Furthermore, any terms or conditions contained within any Exhibit or Attachment hereto which purport to modify the allocation of risk between the parties, provided for within the body of this Agreement, shall be null and void.

26. Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

27. No Third Party Beneficiaries. The rights, interests, duties and obligations defined within this Agreement are intended for the specific parties hereto as identified in the preamble of this Agreement. Notwithstanding anything stated to the contrary in this Agreement, it is not intended that any rights or interests in this Agreement benefit or flow to the interest of any third parties.

28. Extent of Agreement. Each party acknowledges that they have read and fully understand the contents of this Agreement. This Agreement represents the entire and integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be

modified only by written instrument duly authorized and executed by both CITY and CONSULTANT.

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IN WITNESS WHEREOF, the parties have executed this Agreement at Fresno, California, the day and year first above written.

CITY OF FRESNO,
a California municipal corporation

By: [Signature]
Scott Mozier, PE, TE,
Director
Public Works Department

ATTEST:
YVONNE SPENCE, CMC
City Clerk

By: [Signature] 4/12/21
Deputy
[Signature]

REVIEWED BY:

[Signature], P.E. 04-12-21
Jesus Avitia, PE, Deputy City Engineer
Public Works Department

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

By: [Signature] 04/08/21
Kristi M. Costa Date
Deputy City Attorney

Addresses:
CITY:
City of Fresno
Attention: Jesus Avitia, P.E.
Deputy City Engineer
2600 Fresno Street, Office 4036
Fresno, CA 93721
Phone: (559) 621-8804

AECOM Technical Services, Inc.

By: [Signature]
Name: Howard Michael
Title: Associate Vice President

[Signature]

By: _____
Name: Armond Tatevossian
Title: Assistant Secretary

Any Applicable Professional License:
Number: C52588
Name: Howard E. Michael, P.E.
Date of Issuance: July 8, 1994

CONSULTANT:
AECOM Technical Services Inc.
Attention: Alan Glen, P.E.
Project Manager
2020 L Street, Suite 400
Sacramento CA 95811
Phone: 916-414-5800
FAX: 916-414-5850

Attachments:

1. Exhibit A - Scope of Services
2. Exhibit B - Insurance Requirements
3. Exhibit C - Conflict of Interest Disclosure Form

Exhibit A

SCOPE OF SERVICES
Consultant Service Agreement between City of Fresno ("City")
and AECOM Technical Services, Inc ("Consultant")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

SCOPE OF WORK (including Deliverables Tasks)

Consultant Service Agreement between City of Fresno ("City")
and AECOM ("Consultant")

Engineering Services for Blackstone McKinley
Burlington Northern Santa Fe (BNSF) Railroad Grade Separation Project

The AECOM Team has prepared this Scope of Work based on the City of Fresno's (City) Request for request for qualifications dated July 17, 2020, the AECOM statement of qualifications dated August 21, 2020, the AECOM presentation to the City's interview panel on September 3, 2020, and a scoping meetings with City Public Works Department staff. This is a complex project involving evaluation of many alternatives for several functions/disciplines. Additionally, there are various identified *optional services* within this Scope of Work that may be necessary or desirable to complete the delivery process of this project. The variation of alternatives and *optional services* amount to a level of uncertainty in the fee to delivery this Scope of Work. In an effort to manage and control project development costs associated with this Scope of Work, a contingency budget has been established based on the fee to deliver the defined *optional services* noted herein, and to account for fees for services that will vary dependent upon alternatives evaluations or other unknown factors.

Optional services would be provided upon negotiated scope and fee at the time of needed services. Variations to services due to unknown factors as may be experienced will be coordinated with the City as they materialize and funded through negotiations. Funding would be obtained from the contingency budget for such services and only upon negotiated fee and a separate notice to proceed from the City for each service.

The Scope of Work will be authorized by the City in "Deliverable Task Orders" as described in the table below.

Deliverable TASK ORDER NO.	TASK DESCRIPTION (Deliverable tied to Duration)	DURATION (Calendar Days from NTP)	RESUBMITTAL (Calendar Days)	TASK ORDER BUDGET	TOTAL NTE BUDGET
P1	PROJECT PRELIM STUDIES, REPORTS, & CONCEPTUAL DESIGN, DESIGN DECISION DOCUMENT	235	14	\$1,450,158.52	\$1,450,158.52

	(Draft Design Decision Document)				
U1	75% UTILITY PS&E PREP, SUBMITTAL & ACCEPTANCE (75% Utility Relocation PS&E)	310	21	\$274,297.56	\$1,724,456.08
GS1	30% GS PS&E PREP, SUBMITTAL & ACCEPTANCE (30% Grade Separation Plans)	150	28	\$698,673.81	\$2,423,129.89
U2	FINAL UTILITY PS&E SUBMITTAL & ACCEPTANCE (Final Utility Relocation PS&E)	100	21	\$155,079.65	\$2,578,209.54
GS2	60% GS PS&E PREP, SUBMITTAL & ACCEPTANCE (60% Grade Separation PS&E)	270	28	\$1,757,737.16	\$4,335,946.70
U3	UTILITY RELOCATION BIDDING, CONSTRUCTION SUPPORT, and CLOSEOUT (Overall Duration not controlled by Consultant) (RFI's, Contractor Submittals, Addendum)	- N/A - As Indicated in Construction Contract Specifications or Utility Agreements	-N/A -N/A	\$202,126.90	\$4,538,073.60
GS3	90% GS PS&E PREP, SUBMITTAL & ACCEPTANCE (90% Grade Separation PS&E)	160	28	\$1,140,769.97	\$5,678,843.57
GS4	FINAL PS&E PREP, SUBMITTAL & ACCEPTANCE (Final Grade Separation PS&E)	140	28	\$342,761.86	\$6,021,605.43
GS5	GS BIDDING, CONSTRUCTION SUPPORT, RECORD DRAWINGS, and PROJECT CLOSEOUT (Overall Duration not controlled by Consultant) (RFI's, Contractor Submittals, Addendum)	- N/A - As Indicated in Construction Contract Specifications	-N/A -N/A	\$462,180.81	\$6,483,786.23

TASK 1 PROJECT MANAGEMENT

Task 1.1 Project Management Plan (P1, U1, U2, U3, GS1, GS2, GS3, GS4 & GS5)***Task 1.1.1 PDT Meetings (P1, U1, U3, GS1, GS2 & GS4)***

AECOM Team members will meet with the City and Project Development Team (PDT) members monthly throughout the project development to discuss project development progress, perform general project coordination across parties' various interests, review the project Action Log and discuss resolutions. A total of 20 meetings are anticipated from notice to proceed to the completion of final design for meeting.

Establish Project Development Team (PDT) / Stakeholder List

AECOM will coordinate with the City to identify key stakeholders to coordinate with during project development. AECOM will establish a stakeholder contract list for use throughout project development.

Task 1.1.2 Project Schedule (P1, U1, U3, GS1, GS2 & GS4)

AECOM will develop a baseline project schedule showing each task, start and end dates, and task duration. This schedule will be updated and coordinated with the City as appropriate. AECOM will notify the City immediately of any problems that could adversely impact the project schedule.

Task 1.1.3 Invoicing with Progress Reports (P1, U1, U3, GS1, GS2, GS4 & GS5)

AECOM will prepare and submit Progress Summary Reports to the City each month. The progress summary reports will identify work completed to date, work anticipated for the next month, and action items necessary to keep the project on track and moving forward, in bullet point format. AECOM will also maintain the schedule to forecast workload on the project including design, environmental, right-of-way and permitting activities. AECOM will provide internal quality control on products submitted to the City. Quality control checkpoints will be shown on the project schedule.

Task 1.1.4 Risk Management / Risk Register (P1, U1, U3, GS1, GS2 & GS4)

AECOM will develop Risk Register to manage identified risks by various categories involving Design, Construction, Environmental, Funding, Geotechnical, Materials, Organizational, Project Management, Railroad, Right of Way, Stakeholders, Surveys, Traffic, and Utilities. Each risk under each category will include a risk response involving: Accept, Avoid, Enhance, Exploit, Share, Mitigate, or Transfer. These risks will be evaluated and managed throughout project development by an appropriately assigned risk owner who will be responsible to monitor and manage the risk to

resolution or retirement. This risk management operation is instrumental in establishing a budget contingency for construction.

Task 1.1 Deliverables

- Meeting agendas and notes
- Progress Schedules (updated as needed)
- PDT Stakeholder Contact List
- Progress Reports with Invoices (monthly)

Task 1.2 Project Development (P1, U1, U3, GS1, GS2, GS4 & GS5)

Task 1.2.1 Field Review and Gather Data (P1)

AECOM will coordinate an initial field review with the City's Project Manager, and other project stakeholders to review the proposed project and to highlight and record significant project features. AECOM will conduct a visual on-site field investigation to identify existing conditions and establish preliminary design assumptions and parameters. AECOM will review any as-built information on file and will also confer with the City as necessary to confirm project assumptions and physical project limits of work.

Task 1.2.2 Conduct Kick-Off Meeting (P1)

AECOM will coordinate a kick-off meeting with the City, and any other project stakeholders that may be appropriate to thoroughly discuss the project background, verify scope, concepts, schedule, and management. This meeting will result in an understanding amongst the project stakeholders as to the project scope and schedule, and major project issues that have already been identified by project stakeholders will be shared at this meeting.

The City will deliver any additional project information available to the AECOM Team at the kick-off meeting.

Task 1.2.3 Coordination with City Departments and Other Agencies (P1, U1, U3, GS1, GS2 & GS4)

The AECOM Team will coordinate with City Departments, the California Public Utilities Commission (CPUC), Burlington Northern Santa Fe Railroad (BNSF), Amtrak, Fresno Municipal Flood Control District (FMFCD), Fresno Irrigation District (FID), State Center Community College District (SCCCD), Fresno County Transportation Authority (FCTA), Fresno Council of Governments (FCOG), the City Fire Department, and other agencies throughout the project duration as described herein to obtain approval of the project.

Task 1.2.4 Stakeholders/Community Outreach Plan Execution (P1, U1, U3, GS1, GS2, GS4 & GS5)

Considering social distancing requirements due to COVID-19, the AECOM Team will be focusing on outreach strategies that can be completed in environments that will keep participants safe, while still providing the valuable input needed for the successful delivery of the Blackstone McKinley Burlington Northern Santa Fe Railroad (BNSF) Grade Separation Project (Project). The AECOM Public Outreach Team is composed of AECOM, and VRPA Technologies, Inc. (VRPA). The AECOM Team will use a combination of traditional in-person and online outreach strategies that have been

successfully adapted to a virtual environment. Should there be positive developments in the fight against COVID-19, and social distancing requirements are lifted, the AECOM Team has the flexibility to implement traditional in-person community engagement.

All community engagement activities for the Project will be designed to be equitable for area residents, businesses, and other stakeholders. Additionally, VRPA is a Certified Trained PublicInput.com Partner and has the capability of deploying the software's full circle public engagement (Meetings, Email, Social Media, Text or SMS Messaging, Online Forums, Surveys) to maximize the effectiveness of public engagement and education for the Project.

Coordination with City Communications Office (P1, U1, U3, GS1, GS2 & GS4)

The AECOM Team will meet with staff from the City's Communications Office and Fresno County Transportation Authority (FCTA) to establish strong working relationships, expectations, and guidelines for project noticing, public meetings, and responses to public inquiries. The Team will work with the City and FCTA to provide for two-way communication opportunities for both the public and the media. Content for communications and public information will be coordinated and disseminated across many different channels including the City's website, social media sites, e-notifications, print notifications, virtual or in-person meetings, and via local media reports. Public Information Meetings scheduled by the City's Communications Office will be led by AECOM Team members in support of City and FCTA staff. In coordination with the City and FCTA, the AECOM Team will prepare content for Public Information Meeting exhibits, presentations, and documentation with AECOM responsible for design and graphic presentation for related meeting materials. Materials will be presented in multilingual formats and interpretation (American Sign Language, hard-of-hearing, language) services will be available upon request.

Meetings to include:

- City | FCTA Communications Kick-off Meeting
- Construction Kick-off Meeting with the public hosted by the PIO Office
- One (1) Construction PIO Meeting with the public hosted by the PIO Office
- Up to six (6) Internal PIO Status Meetings
- ~~Options:~~ Six (6) Construction PIO Meetings with the public hosted by the PIO Office and up to twelve (12) Internal PIO Status Meetings

Stakeholder Database (P1)

The AECOM Team will coordinate with City of Fresno staff to compile a stakeholder database to be used during the Project's planning process. The City may also be requested to provide resident and business address labels within the surrounding Project area, should direct notices/mailers be preferred. The database will contain the name of individuals or organizations, their physical and email addresses, telephone number(s), notes regarding their participation during outreach activities, and comments received. The listing will be expanded and updated as work on the Project progresses. The stakeholder database will be used to assist with the dissemination of Project information, materials, and noticing.

With their knowledge and proximity to the Project area, Fresno Community College, local area businesses, advocacy groups, and Community-Based and Faith-Based

Organizations (CBOs/FBOs) will be important partners for the community outreach component. These stakeholders will be identified and highlighted in the database. The database will also be augmented with contact information provided by visitors of the Project webpage.

Work Activities to Include:

- Request and compile databases
- Augment compiled database
- Maintain database (assumes maximum of 12 hours per year)
- ~~Coordinate~~ Stakeholder Database maintenance to a maximum of 23 hours per year
-

Business and Key Stakeholder Coordination Meetings (P1, U1, U3, GS1, GS2, GS4 & GS5)

The AECOM Team will work with City staff to schedule coordination meetings, as needed, with key stakeholders and businesses. Coordination meetings will afford the AECOM Team the opportunity to present critical Project information directly to businesses and key stakeholders. In addition to the community workshops, these coordination meetings will provide businesses and key stakeholders with additional opportunities to provide their input on the Project's planning process. These meetings will also be used to establish relationships and request assistance with distribution of Project materials.

VRPA Technologies will provide up to 2 hours of time per quarter to meet with the Business and key stakeholder groups. Meeting materials including presentations would be prepared as needed.

Community Outreach Event Noticing (P1 & U1)

Public noticing information prepared for the Project will be straightforward, factual, and designed to be appreciated by the non-technical audiences. Each communication tool will include contact information, the appropriate contact name(s), office phone and email address. The communication shall include the description of work, community outreach event date, time and other necessary information.

Public noticing materials will be prepared and graphically developed by the AECOM Team, and provided to City staff for printing and posting to the Project webpage and social media accounts.

A public notice/advertisement will be circulated through appropriate print media (Fresno Bee or other print media with wide distribution) or digital newspaper at least one week prior to a community outreach event. It is assumed that the costs of advertising the workshop notices will be the responsibility of the City.

The AECOM Team will prepare and distribute multilingual community outreach event invites via email notification to the Project stakeholder database and other identified key stakeholders. A total of 2 email notifications will be completed prior to each event, which will include an initial notification two weeks prior to the scheduled workshop and 2 follow-up reminders.

The AECOM Team will also coordinate with City staff to identify other potential noticing strategies that could be used to inform stakeholders and community residents of upcoming outreach activities. Potential noticing options include:

- Banner Ads, Print Ads
- Pole Banner Signs
- Digital signage or message marquees of local agencies, businesses, or schools
- Media release(s) to the TMC, speaker bureau kits, Public Service Announcements (PSA's), or similar
- Posting on the Project webpage

Community Outreach Event #1 – Project Overview & Alternatives (P1)

The AECOM Team will plan, schedule, and facilitate a second community outreach event so that stakeholders and the public can review the alternatives being considered during the Project design process. Roles and responsibilities will be the same as noted for community outreach event #1. The event will allow the Team to gather input from attendees on aesthetic treatments for the Project. Real-time polling and a charrette exercise will be utilized to assist stakeholders in providing feedback.

All community outreach events will include visual and/or audio translation services to ensure broad participation and equity for all community stakeholders. The AECOM Team will also develop an event synopsis, summarizing results of polling and charrette exercises, documenting comments received from attendees, and identifying materials provided at the workshop.

Community Outreach Event #2 – Selected Alternatives & Aesthetics (P2)

Once a preferred design alternative has been identified, the AECOM Team will plan, schedule, and facilitate a third community outreach event. Roles and responsibilities will be the same as noted for events #1 and #2. The purpose of this event will be to ensure that the stakeholders and the public are aware of the preferred alternative and can provide additional input and insight on the alternative. The event will also give the Project Team an opportunity to discuss the duration of construction, traffic impacts, and how the City will be mitigating these Project impacts.

All community outreach events will include audio and/or visual translation services to ensure broad participation and equity for all community stakeholders. The AECOM Team will also develop an event synopsis, documenting comments received from attendees and identifying materials provided at the workshop.

Task 1.2.5 Bi-monthly Coordination Meetings with Utility Companies (P1, U1, U3, GS1, GS2 & GS4)

AECOM will conduct monthly meetings with utility companies to collectively coordinate relocations planning and design activities. Due to COVID-19, these meetings are anticipated to be held virtually throughout 2021 and to involve up to 12 meetings. It is anticipated that in 2022, face to face meetings will resume and 9 meetings will finalize this coordination through final utility relocation design.

A utility owner tracking log will be prepared and maintained to identify owner, track when communications occurred and with whom, assigned action items, type of facility, when 'A' letters were sent and response received, any comments, and prior rights from available record maps.

Task 1.2.6 Bi-weekly Design Team Meetings (P1, U1, U3, GS1, GS2 & GS4)

AECOM will conduct biweekly internal design progress meetings with the design team during the project design phase. These meetings will focus on overall schedule, progress of each team members design responsibilities, anticipated issues for proactive mitigation or resolution, action item development and resolution, and internal progress submittals for coordination and validation of design. A total of 40 meetings are anticipated through utility relocation design. A total of 20 additional meetings are anticipated beyond utility relocation design through final grade separation design.

Task 1.2 Deliverables

- Kick-Off meeting agenda and notes (8.5x11 pdf)
- Public information meeting exhibits (24x36 pdf)
- Public information meeting presentations (PowerPoint)
- Stakeholder Database (8.5x11 pdf & hard copies (6))
- Webpage graphical layout and content (pdf, jpg or png images/data)
- Project related materials for posting (pdf, jpg, or png images/data)
- Public noticing materials (pdf, jpg, or png images/data)
- Responses to public comments and questions (8.5x11 pdf & hard copies (6))
- Workshop synopsis (8.5x11 pdf & hard copies (6))

PHASE P1 – Preliminary Studies, Reports, Concept Design & Design Decision Document

& PHASE U1 – 75% Utility Relocation Plans

TASK 2 PRELIMINARY ENGINEERING

Task 2.1 Preliminary Studies and Reports

Task 2.1.1 Surveys / Basemap (By City)

Horizontal and Vertical Control

Horizontal and vertical project control will be established for the project area. The survey control will be tied into the North American Datum of 1983 (NAD83), California State Plane Coordinate System Zone 4, and the North American Vertical Datum of 1988 (NAVD88). Survey control monuments will be established outside of anticipated construction area, so these points may be used by the design team and future construction teams. GPS and Digital levels will be utilized to establish the horizontal and vertical components. Aerial targets will be set and tied to the project control network before the topographic surveys are conducted.

Topographic Surveys

Aerial mapping and conventional ground survey methods will be utilized to complete the topographic surveys of the grade separations at McKinley and Blackstone Avenues, the BNSF Railroad, and other areas of interest. This includes the location of underground utilities and potholing.

The aerial mapping will capture the project limits as defined by the AECOM Team and City and will be tied into the horizontal and vertical control established for the project. Topographic "boots on the ground" field surveys will be performed the City of Fresno Survey Team. The ground surveys will typically include top of curb, flowline, lip of gutter, edge of pavement, front and back of walk, medians, parkway facilities, curb returns, driveways, poles, lamps, grade breaks, and surface visible indications of utilities within these defined limits. The aerial mapping and topographic data will be downloaded, processed, and tied to the horizontal and vertical control established for this project. The data will be plotted in CAD and a digital terrain model (DTM) created for the existing ground surface. As a separate cost, a digital orthophoto will be prepared over the extents of the aerial mapping defined above. The final deliverables will include the digital terrain model, topographic data plotted in MicroStation (or other City drafting platform), and an ASCII file of the topographic survey points.

For this project, the City will perform all the topographic survey tasks including the location of utility markings but excluding the ground surveys for the BNSF Railroad. All "supplemental" topographic surveys will be collected using a total station for hard surface features. The City will process the data using Trimble Business Center software or similar.

Land Net Mapping

A centerline and land net survey will be performed by the City for the streets, alley ways offsite improvement area and the BNSF right-of-way within the project limits. Cadastral research will be performed with the County of Fresno, the City of Fresno, and Caltrans District 6 for available right-of-way maps, corner records, and centerline tie notes within the project limits. Centerline and other key monuments will be recovered and tied into the project controls. The centerlines of Blackstone and McKinley Avenues and the intersecting streets will be computed and mapped.

The City will file two Records of Survey to meet the requirements of the California Professional Land Surveyors' Act Section 8762. The first will be the pre-construction Record of Survey over the affected parcels and the second will depict the newly monumented right-of-way.

Task 2.1.1 Deliverables by the City

- Land net mapping file (Civil 3D) to AECOM
- Legal descriptions and plats (8.5x11 pdf) to AECOM
- Geo-referenced digital orthophoto aerial imagery (tiff & tfw) to AECOM
- Topographic survey data (ASCII) to AECOM
- Field notes (8.5x11 pdf) to AECOM
- Topographic mapping of processed points (Civil 3D) to AECOM
- Actual pothole locations (ASCII) to AECOM

Task 2.1.2 Environmental (Optional)

Lead Compliance Plan

Elevated lead concentrations exist in soils along older roadways as a result of aeri ally deposited lead (ADL) from the historical use of leaded gasoline. The AECOM Team will

evaluate the presence, concentration, and distribution of lead in soil prior to grading/construction activities. The data will be used to evaluate soil within the proposed construction area to assess the potential for reuse on the project, or to evaluate disposal options for potentially lead-impacted soil, and to evaluate health and safety issues for future on-site workers. Boreholes will be advanced every 20 feet within the project limits along the road/rail right-of-way. Hand augers will be advanced to 1-foot below ground surface, soil sample collected from 1-foot bgs and analyzed for CAM 17 metals, including lead. A report will be prepared with conclusions and recommendations and analytical results.

In the event that lead impacted soil is discovered in shallow soil beneath the site, Soar Environmental will prepare a site-specific work, and health and safety plan, provide project management and coordination, advance shallow borings, collect appropriate soil samples, submit to an accredited laboratory, prepare a report of our findings, and communicate with the Department of Toxic Substances Control (DTSC) to potentially reuse lead impacted soil on the Project, similar to the Soil Management Agreement DTSC has established with Caltrans. If elevated lead concentrations are discovered in the Project footprint, Soar Environmental will prepare a Lead Compliance Plan to describe the Best Management Practices implemented to prevent/reduce Project activities from emitting airborne lead, the health and safety of construction workers and the public, administrative controls, monitoring, sampling, reporting, and record keeping.

Phase I Environmental Site Assessment (ESA)

The AECOM Team will research to estimate the potential for hazardous substances or petroleum product impacts (i.e., levels warranting regulatory cleanup action) to the Site. For the purposes of this Phase I ESA, the "vicinity" of the Site is defined as by the 29 Parcels located within ¼ mile of the Site.

The scope of services for the Phase I ESA will include:

- Reconnaissance of the Site to assess for the presence or make visual observations of indicators of the potential existing presence, of hazardous materials, hazardous wastes, or soil and/or groundwater impacts on the Site. These indicators may include 55-gallon drums, underground and aboveground storage tanks, chemical containers, waste storage and disposal areas, industrial facilities, discolored surficial soils, electrical transformers that may contain polychlorinated biphenyls (PCBs), and areas conspicuously absent of vegetation. If access is unavailable to any portions of the Site, our ability to complete the assessment described herein may be hindered. Wetlands delineation, asbestos and lead-containing paint surveys, and testing for lead in drinking water, radon, and methane gas are not included in the Phase I ESA scope of services.
- Performing a visual survey of adjacent properties from the Site and from public thoroughfares to observe general types of land use surrounding the Site.
- Reviewing the Standard Environmental Records Sources: Federal and State as referenced in ASTM Designation E 1527-13 and 40 CFR Part 312 to obtain information regarding the potential presence of hazardous substances/petroleum hydrocarbons on the Site or on properties located within the approximate minimum search distance specified for each source. The records searched will include registries or publicly available lists of recorded engineering and institutional controls, and recorded land use restrictions for properties/facilities with the potential to impact or have impacted the Site.

- Reviewing reasonably ascertainable regulatory agency files for the Site and/or properties in the vicinity of the Site with environmental conditions that could potentially impact the Site. The sources for these files could include Fresno County Environmental Health, the California Regional Water Quality Control Board, and the California Department of Toxic Substances Control.
- Contacting local public agencies by telephone or in writing to obtain readily ascertainable information regarding underground storage tank permits, agriculture-related permits and violations, air emission permits and violations, and electrical transformers. The information would be obtained for the Site and adjacent properties. The agencies contacted may include the building department, the local air pollution control agency, the agricultural commissioner's office, and gas and/or electric utility companies.
- Reviewing pertinent and reasonably ascertainable information sources to evaluate physiographic, geologic, and hydrogeologic conditions in the vicinity of the Site.
- Reviewing EDR Sanborn, Inc. Fire Insurance Maps for the Site and vicinity (if available to obtain information concerning the historical uses of the Site and the potential presence of underground storage tanks on the Site).
- Reviewing and interpreting reasonably ascertainable historical aerial photographs to obtain information concerning the historical use of the Site and adjacent properties.
- Reviewing United States Geological Survey (USGS) topographic maps to obtain information relative to the topography of the Site, as well as previous development and uses of the Site and properties located in the vicinity of the Site.
- Reviewing documents provided by the Client, at their discretion. Potentially useful documents may include geotechnical, geologic, and environmental reports, site plans, plot plans, and correspondence with regulatory agencies.
- Reviewing California Department of Conservation, Geologic Energy Management Division (CalGEM) records to obtain information regarding the locations of potential oil and gas wells on the Site and site vicinity.
- Reviewing recorded land title records for the Site in accordance with the requirements identified in 40 CFR Part 312, if requested. The purpose of obtaining a chain-of-title report is to assess whether any requirements regarding engineering and institutional controls have been recorded for the Site, and whether any land use restrictions and/or environmental cleanup liens are associated with the Site. As an alternative, we can order an environmental lien report for the Site for an additional fee.
- conducting interviews by telephone or in writing with present and past tenants/owners of the Site to evaluate if present or past occupants have used, generated, stored, or disposed of hazardous materials/wastes onsite.
- preparing a report summarizing the findings of the Phase I ESA and qualitatively describing the potential for environmental impairment of the Site. If necessary, we will also provide recommendations for additional environmental services in the report.

Project Screening: Regulatory Agency and Other Records Review – The AECOM Team will review reasonably ascertainable records that will help identify Recognized Environmental Conditions (RECs) in connection with the Site. These records include federal and state regulatory agency lists of hazardous waste generators, leaking underground storage tanks (USTs), landfills, military reservations, contaminated surface waters, and Superfund sites. These lists, as well as reasonably ascertainable existing documentation as cited below, will be reviewed to assess whether there were prior investigations or events and conditions, or institutional or engineering controls on the

property and in the immediate vicinity, relating to spills, discharges, or other activities resulting in contamination or presence of hazardous materials. Kleinfelder will review previously conducted environmental assessments of the subject site (as provided by the client) and standard environmental record sources, which include published lists of regulatory agency investigations and/or enforcement actions, for facilities located near the Site.

The AECOM Team will enhance and supplement the standard environmental record sources with local and/or additional state or tribal records when, in our judgment, such additional records are readily ascertainable, sufficiently useful, accurate, and complete in light of the record review objective, and are generally obtained, pursuant to local good commercial or customary practice, in ISAs in the type of commercial real estate transaction involved.

Sources of such records may include the local department of health/environmental division, fire department, planning department, building permit/inspection department, local regional pollution control agency, local/regional water control agency, and local electric utility company.

Physical Setting Review – The physical setting review is required by the Standard Practice to include a current United States Geological Survey (USGS) 7.5 Minute Topographic Map. The review may also include discretionary physical setting sources, e.g. for geologic and hydrogeologic information. This information may provide insight to the significance of offsite sources of contamination in relation to the Site. When discretionary hydrogeologic information is available and reviewed, where possible we will estimate the regional direction of groundwater flow and discuss how this might affect the potential for identified offsite sources of contamination to impact the Site. Specific sources of physical setting information may include:

- United States Geological Survey reports and maps;
- Information provided by public agencies (e.g., state department of water resources, local flood control district, local or county water agency);
- Information from previous Kleinfelder experience in the area; and
- Information provided by the Client (e.g., previous investigation or soils reports).

Historical Land Use Review – The AECOM Team will research historical information sources to develop a history of general types of previous uses of the Site and surrounding area (e.g., office, retail, residential, industrial, and manufacturing). Obvious uses of the Site will be identified from the present back to the Site's first developed use, or back to 1940, whichever is earlier. The review will include as many standard historical sources as are necessary and both reasonably ascertainable and likely to be useful. For the purpose of this review, "developed use" includes agricultural use and placement of fill dirt. The review will include documentation of gaps in the history of use.

Uses of the area surrounding the Site will be identified only to the extent that this information is revealed in the course of researching the Site itself. The following information sources may be used, as necessary, to research the Site history:

- Aerial photographs;
- USGS topographic maps;
- Fire insurance maps (e.g., The Sanborn Library, LLC Fire Insurance Maps);

- Local street directories;
- Property tax files;
- Recorded land title records;
- Building department records; and
- Zoning/land use records.

Site Reconnaissance – The AECOM Team will perform a reconnaissance of the Site by driving along the project corridor. Where appropriate and safe, The AECOM Team will perform additional Site reconnaissance on foot. It is assumed that no structures are included in the project area and interior observations of structures are not included. The AECOM Team will observe the property and its current use with the unaided eye, and thereby obtain information indicating the likelihood of identifying evidence of RECs in connection of the Site. The Site property located on the Site will be observed to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles. The periphery of the Site will be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the Site, the use of the road or path will be identified to assess whether it was likely used as an avenue for disposal of hazardous substances or petroleum products. During the site inspection, the AECOM Team will photographically document conditions at the time of the Site visit.

Vicinity Survey – The AECOM Team will perform a reconnaissance of immediately adjoining properties to observe the properties' current use and past use(s) to the extent that past uses are discernible. This survey will be performed to note facilities that have an obvious potential to affect the environmental conditions at the Site. However, these properties may be observed without physical access.

Interviews – The AECOM Team will interview past and present owners and occupants, with the objective of obtaining information indicating RECs in connection with the Site. The interviews should include a "Key Site Manager," a person with good knowledge of the uses and physical characteristics of the property. The Client will be responsible for supplying the contact information, including name and telephone number, of the Key Site Manager. If reasonably possible, Kleinfelder will attempt to interview the Key Site Manager at the time of the Site visit.

The AECOM Team will also make a reasonable attempt to interview at least one staff member of the local fire department that serves the property, the local/regional office of the health agency that serves the area, the local/regional agency having jurisdiction over hazardous waste disposal, or the local/regional agency responsible for the issuance of building permits or groundwater use permits.

Report and ISA Determination – The AECOM Team will provide a final report that will include an evaluation of the information obtained from the ISA. The report will include findings, opinions, and conclusions. The report will include illustrations and pertinent regulatory agency documentation regarding the Site.

The report will also include the ISA Checklist and "Yes or No" Determination from Caltrans Project Development Procedures manual (07/01/99), Appendix DD-Hazardous Waste.

Phase II Environmental Site Assessment (ESA)

The Phase II ESA scope will be determined after completion of the Phase I ESA(s). For simplicity at this stage of the project, we are assuming every parcel will require a Phase II ESA. The following is general description of the Phase II ESA for the 29 parcels. The AECOM Team will mark the ground with white paint and call Underground Service Alert to notify utility subscribers to identify the location of their utilities. The AECOM Team will retain Ground Penetrating Radar Services for utility clearance of each planned boring location.

The AECOM Team will advance direct-push borings at parcel to observe subsurface conditions to maximum depth of 20 feet and to collect soil samples. In each boring we will collect a soil core by pushing clean, stainless-steel, hollow rods fitted with 4-foot-long clear acetate liners to a maximum depth of 6 feet. As the push rods are driven downward, the acetate liners fill with soil (the soil core). Following removal of the soil cores from the drive rods, the soil types in the cores will be logged in accordance with the Unified Soil Classification System by our field geologist working under the supervision of a California Professional Geologist. Any visual evidence of contamination or fill will be noted on the log and readings from the photoionization detector. Soil samples will then be collected from the soil cores at the desired depths by cutting 6-inch-long sections from the core and capping them with Teflon® sheets and polyethylene end caps. Soil samples will be collected at one-foot-depth intervals starting at one foot below ground surface and continuing to the termination depth. Each sample will be labeled with a unique sample ID, date and time of collection, sampler's initials, and the project name and number then will be placed in a cooler with ice for transport to the laboratory under chain- of-custody. Borings will be backfilled as described in City of Fresno specifications.

The AECOM Team will retain Torrent Laboratory of Milpitas, California for laboratory chemical analysis of soil samples. Contaminants of Concern (COCs) will be determined upon completion of the Phase I ESA. The following is a summary of anticipated COCs and corresponding analysis:

- Residential Parcels (5): CAM 17 metals, organochlorine pesticides
- Current and Former Automotive Industrial Parcels (21): Total Petroleum Hydrocarbons – gasoline, diesel, and motor oil, oil and grease, volatile organic compounds, and CAM 17 metals
- Industrial Parcels with Manufacturing (1): Total Petroleum Hydrocarbons – gasoline, diesel, and motor oil, oil and grease, volatile organic compounds, CAM 17 metals, and polychlorinated biphenyls
- FMFCD Basin and Vacant Parcel (2): Total Petroleum Hydrocarbons – gasoline, diesel, and motor oil, oil and grease, volatile organic compounds, CAM 17 metals, and polycyclic aromatic hydrocarbons.
- The AECOM Team will prepare a Phase II ESA report for describing the field investigation, laboratory analysis of samples and presenting our findings. The reports will include:
 - Project description including the purpose and objectives;
 - Description of field activities;
 - Description of observed soil conditions;

- Summary of soil and groundwater sample laboratory analysis results;
- Appendices including soil boring permits, boring logs, and laboratory reports;
- Vicinity Map and Site Plan showing the boring locations; and,
- Site photographs.

The scope of the Phase II ESA does not include an asbestos, lead-containing paint, or universal waste survey performed our California Department of Occupational Safety and Health (Cal/OSHA) certified asbestos consultants (CAC), and Certified Lead Paint Inspectors/Assessors/Project Monitors with the California Department of Public Health (DPH). This can be included for an additional cost.


Work Plan for Site Demolition

This service will be provided by the City. The AECOM Team can provide this service if desired by the City. This AECOM additional service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task 2.1.2 Deliverables

- None, Task 2.1.2 is Optional

Task 2.1.3 Hydrology / Hydraulic

AECOM will research existing drainage facilities currently tributary to the project area to determine existing flow paths and tributary watersheds. Proposed roadway inlet locations and tributary areas will be based on preliminary geometrics. Rational Method Calculations will be prepared using input from the FMFCD for existing watersheds. Roadway inlet flows will be calculated based on City of Fresno requirements for a 100-year return frequency (Note  year return selected due to sump risk). Allowable outflow to FMFCD collection systems will be calculated based on a 2-year return frequency. The required pump station capacity and storage volume will be determined based on the difference between the two flow rates.

A conceptual level evaluation of three pump station alternatives will be conducted utilizing the calculated flows.

- Pump to existing 30" FMFCD pipeline in McKinley Avenue
- Pump to existing 30" FMFCD pipeline in Blackstone Avenue
- Pump through a new pipeline to existing FMFCD Basin CC, with pumping to FID Dry Creek

Concept layouts of facility improvements and concept-level construction and operations and maintenance cost estimates will be developed for comparison of alternatives. Additional easement or right-of-way needs will be identified. The advantages and disadvantages of each pump station alternative will be determined and evaluated. The results of the above analysis will be summarized in a draft Hydrology and Hydraulics Study. Upon review and receipt of comments from the City of Fresno and the FMFCD, the recommended alternative will be described in a final Hydrology and Hydraulics Study.

Task 2.1.3 Deliverables

- Concept pump station facility layouts (11x17 pdf & hard copies (6))
- Concept-level construction and O&M cost estimates (8.5x11 pdf & hard copies (6))
- Hydrology and Hydraulics Study – draft & final (Word & 8.5x11 pdf & hard copies (6))

Task 2.1.4 Traffic Analyses

Construction Traffic Impact Analyses (by City)

The AECOM Team will provide a request to the City for traffic modeling to be performed by the City for construction detour influences on traffic circulation in the project area.

The City will provide AECOM the results of model runs for AECOM to evaluate and prepare construction and traffic control strategies that will allow for the movement of all travel modes through the construction area per the city's specifications. Capacity analysis will be conducted for roadways by the City where the number of travel lanes are reduced and consideration will be given to providing roadway improvements on alternate routes. Examples of roadway improvements that will be considered include:

- Addition of turn lanes or through lanes
- Modification of traffic signal phasing
- Modification of signal timing
- Signing changes
- Intelligent transportation systems (ITS) improvements

It is assumed that this analysis will be conducted for three construction phases and that up to 12 intersections will be included. Although there will be many more phases of construction, many will be similar from the point of view of traffic and three critical phases will be selected. It is also assumed that the traffic analysis for the construction area and alternate routes will consist of 12 intersections and 12 roadway segments. If it is decided to provide roadway improvements on alternate routes, the AECOM Team can provide the traffic engineering design for the improvements (traffic signal design, signing, and striping) as an *optional* task. This additional service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

This task will include the following detailed steps:

- The City will prepare the transportation analysis scoping to identify the detailed methodology for the study
- Identify study area
- The City will obtain traffic counts.
- Existing traffic signal timing from the City of Fresno will be provided.
- The City will conduct capacity analysis using the Synchro traffic signal timing program or equivalent intersection capacity analysis software
- The City will provide AECOM the traffic analyses results.
- AECOM will assess the traffic analyses results and make recommended roadway improvements and/or modifications to the construction process to provide for facilitated multimodal transportation movements
- Document the results of the analysis describe above in a technical memorandum
- Participate in up to 8 virtual project meetings to discuss the study

Parking Study of Construction Impacts to College Access (Optional)

For each major phase of construction, the AECOM Team will conduct an analysis to determine the potential impacts of the construction on parking and parking access to Fresno City College. In addition,

VRPA will make recommendations on how construction plan might be modified to minimize any potential effects to parking and parking access. The following will be included for each phase:

- Determination of the number of off street and on street parking spaces in the college area that would be lost due to construction (if any)
- Analysis of potential delays in access parking areas, including identification of any roadway segments or intersections that would be expected to operate at level of service E or F during the construction phase
- Analysis of any changes in access to bicyclists/pedestrians/transit riders
- For the above, recommendations will be made for any improvements which could be made.

This scope of work assumes that up to three construction phases will be analyzed.

Task 2.1.4 Deliverables

- Traffic Analyses Technical Memorandum (By City)– draft & final (Word & 8.5x11 pdf & hard copies (6))

Task 2.1.5 Geotechnical

Geotechnical Design & Materials Report

A Preliminary Geotechnical Design & Materials Report (PGDR) will be prepared and will address the intersection improvements at Blackstone and McKinley Avenues extending approximately 650 feet west, 375 feet east, 350 feet north, and 850 feet south of the intersection. Improvements will also include E. Home Avenue extending approximately 280 feet west of Blackstone Avenue. The PGDR will generally include roadway corridor improvements, temporary shoring, excavation, earthwork, new pavements, retaining walls, underground utilities, various signs, and lighting. The 42-inch RTM within McKinley avenue will utilize a combination of traditional cut and cover installation except for a possible jack and bore installation for one alternative alignment being considered beneath the BNSF railroad at E. Home Avenue. The PGDR will address the following:

- Research and Data Collection: Review of readily available geologic and soil literature in the vicinity of the site.
- Permits/USA Clearances: We will comply with local permit requirements. Borings are assumed to be performed within the City of Fresno right-of way and private property, which will require City of Fresno Encroachment Permit and Well Construction Permits to complete the proposed investigation. We assume permit fees for the City of Fresno Encroachment and Well Construction permits will be waived. It is assumed that the City of Fresno will allow borings to be performed within daylight hours between 7AM and 4PM. If the City requires the work to be performed at night due to traffic congestion concerns, additional costs will be incurred due to traffic control and wages that would require budget augmentation from the contingency fund.
- Field locate the borings, call for Underground Service Alert (USA), and use ground penetrating radar (GPR) for clearance of utilities at boring locations. We also assume that the City of Fresno or AECOM will provide Kleinfelder and our subcontractors access to the private properties to perform select borings primarily near the railroad property.
- Field Exploration: We will perform the borings and for both the roadway widening and bridges concurrently. The boring program for the borings associated with the roadway improvements is provided in the table below.

<i>Project Element</i>	<i>Number of Explorations¹</i>	<i>Approximate Depths</i>
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Blackstone Avenue	8 Auger Borings	15 to 50'
McKinley Avenue	4 Auger Borings	15-50'
Home Avenue	1 Auger Boring	25'

Note: 1) Borings will be performed outside the BNSF Railroad right-of-way within approved City and private properties.

- Utility Borings: Home Avenue, Calaveras Street, and Effie Street for utilities and jack and bore crossing planned at the BNSF Railroad and Home Avenue Alignment.

Project Element	Number of Explorations¹	Approximate Depths
Calaveras Street	8 Auger Borings	15'
Home Avenue and BNSF	4 Auger Boring	15 to 25'
Effie Street	2 Auger Borings	15'

Note: 1) Borings will be performed outside the BNSF Railroad right-of-way within approved City and private properties.

- The explorations will provide an evaluation of pavement structural section and subsurface conditions for the proposed roadway portion of the project. The boring locations will depend upon the available access and any boring data from previous studies. We anticipate using a truck mounted drill rig for our work.
- Classify and continuously log subsurface soil conditions encountered in each test boring at the time of exploration. Obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and backfilled with soil cuttings (boring depths < 10 feet) or cement grout (boring depths > 10 feet) to within 5 feet of the ground surface followed by soil cuttings to the surface, unless directed otherwise by the City of Fresno. Borings performed within the paved right-of-way will be patched with rapid set concrete dyed black or within unpaved areas, the ground surface at the boring location will be raked smooth to approximately match the ground surface conditions in the vicinity of the boring.
- Laboratory Testing: Perform laboratory tests on representative soil samples such as moisture density, direct shear, gradation analyses, R-value, maximum density/optimum moisture, corrosion, and Plasticity Index tests, as necessary.

Based on engineering evaluation and analysis of the field and laboratory data a PGDR will be prepared. The PGDR will summarize the field and laboratory programs and provide comments and preliminary recommendations to support the 30% Submittal and will follow Caltrans guidelines. The PGDR will be updated as necessary to produce the final GDR for support of the final design of the roadway. It is anticipated the GDR will include:

- A description of the proposed project, including a site vicinity map showing the location of the project alignment and a site plan showing the approximate locations of the exploration points for this study;
- General description and characteristics of the subsurface materials along the roadway and retaining wall alignments, including boring logs;
- A summary of the field exploration and laboratory testing programs;

- Discussion of regional and local geology, including faults and seismicity;
- Comments and recommendations for site preparation and earthwork grading;
- Recommendations for temporary and permanent slopes;
- Recommendations for temporary shoring considering soldier pile and lagging, sheet piles, and secant pile alternatives;
- Recommendations for pole foundations for signs, lighting, and signals;
- Recommendations for foundation design of retaining walls supported on spread footings;
- Recommendations for full depth and multi-layer HMA pavements. Recommendations will be given for overlay and use of Full depth Reclamation (FDR), if appropriate;
- Recommendations for the design and construction of buried utilities and below grade structures and vaults;
- Recommendations for jack and bore crossings at the BNSF railroad at McKinley and Home Avenue alignments; and
- Comments on the general corrosion potential of on-site soils to buried metal and concrete. Corrosion tests to include resistivity, pH, Soluble Chloride, Soluble Sulfate, sulfides, redox, and bicarbonates.

The PGDR will be updated as necessary to produce a final GDR for support of the final design of the roadway.

Bridge Foundation Report(s)

Following is a task breakdown for the proposed bridge crossings at Blackstone/McKinley Avenue BNSF Grade Separations. The Foundation Reports may be subject to review by the City of Fresno and BNSF and will follow AREMA Manual for Railway Engineering (MRE), AASHTO, LRFD Bridge Design Specifications latest edition, and Caltrans guidelines and formats. It is assumed there will be a type selection meeting with the design team.

- **Research and Data Collection:** Review of readily available geologic and soil literature in the vicinity of the site including review of any as-built drawings and existing LOTB.
- **Permits/USA Clearances:** We will comply with local permit requirements. Borings are assumed to be performed within the City of Fresno right-of way and private property, which will require City of Fresno Encroachment Permit and Well Construction Permits to complete the proposed investigation. We assume permit fees for the City of Fresno Encroachment and Well Construction permits will be waived. It is assumed that the City of Fresno will allow borings to be performed within daylight hours between 7AM and 4PM. If the City requires the work to be performed at night due to traffic congestion concerns, additional costs will be incurred due to traffic control and wages.
- We will field locate the borings, call for Underground Service Alert (USA), and use GPR for clearance of utilities at boring locations. We also assume that the City of Fresno or AECOM will provide Kleinfelder and our subcontractors access to the private properties to perform select borings primarily near the railroad property.
- **Field Exploration:** Because of high costs associated with performing field borings we plan on performing the borings for both the project structures at the same time

as the borings for the GDR. The boring program for the FR is provided in the table below.

Project Structure	Number of Explorations¹	Approximate Depths
Blackstone Grade Sep	3 Auger/Rotary Borings	Abutments - 2 borings to 110' Bent - 1 Boring to 150'
McKinley Grade Sep	3 Auger/Rotary Borings	Abutments - 2 borings to 110' Bent - 1 Boring to 150'

Note: 1) Borings will be performed outside the BNSF Railroad right-of-way within approved City and private properties.

- Classify and continuously log subsurface soil conditions encountered in the test borings at the time of drilling. Obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and backfilled with neat cement grout. Borings performed within the paved right-of-way will be patched with rapid set concrete dyed black or within unpaved areas, the ground surface at the boring location will be raked smooth to approximately match the ground surface conditions in the vicinity of the boring.
- Laboratory Testing: Perform laboratory tests on representative soil samples such as moisture density, direct shear, gradation analyses, corrosion tests and Plasticity Index test, as necessary.
- Allowance has been made to attend four team meetings or conference calls for type selection and design purposes.

Based on engineering evaluation and analysis of the field and laboratory data, a Preliminary Foundation Report (PFR) will be prepared for both bridge structures. A final Foundation Report (FR) will be prepared for both structures once the bridge and foundation geometry and loads have been finalized and all review comments have been received. The report will follow basic Caltrans LRFD guidelines and the current AREMA Manual for Railway Engineering (MRE), AASHTO Bridge Design Specifications and Caltrans Amendments. The FR will present final comments and recommendations to aid in design of the bridge. It is anticipated that the following specific items will be included in the FR:

- A description of the proposed project;
- Discussion of the field and laboratory testing programs;
- Comments on the regional geology and site engineering seismology, including the potential for liquefaction and seismically induced settlement;
- Recommended peak ground acceleration and ARS curve based on Caltrans Seismic Design Criteria 2.0;

- Recommended parameters for use in design of the selected foundation type. Pile Data Table would be provided for CIDH piles per Caltrans Memo to Designers (MTD) 3-1;
- Recommendations for design of laterally loaded piles by the bridge designer, including LPILE profile;
- Comments on soil stiffness and ultimate equivalent lateral pressure for resisting dynamic loading of abutment walls;
- Comments on the corrosion potential of foundation soil; and
- Log of Test Boring drawings suitable for inclusion into the contract drawings.

Task 2.1.5 Deliverables

- Preliminary Geotechnical Design and Materials Report (8.5x11 pdf & hard copies (6))
- Final Geotechnical Design and Materials Report (8.5x11 pdf & hard copies (6))
- Foundation Reports – draft & final (8.5x11 pdf & hard copies (6))

Task 2.1.6 CPUC / BNSF Field Diagnostic Meeting

Following the concept design submittal to BNSF, the AECOM Team will organize and lead the field diagnostic meeting with BNSF, the CPUC, the City, other public agency stakeholders and the design team. The AECOM Team will prepare and provide the necessary materials for this meeting as well as the agenda. Meeting notes will be prepared and distributed to the meeting attendees, incorporating all comments, input and action items identified.

Task 2.1.6 Deliverables

- Meeting agenda (8.5x11 pdf & hard copies (6))
- Meeting notes (8.5x11 pdf & hard copies (6))

Task 2.1.7 Intersection Signal Analyses – Blackstone / University (Optional)

This task would analyze the potential for installing a traffic signal at the Blackstone Avenue/University Avenue intersection as part of the construction process to improve multimodal transportation conditions following construction. This would include estimation of traffic counts after construction as well as analysis of bicycle and pedestrian counts if available. The analysis would include consideration of the peak hour signal warrant as well as any other signal warrants for which data is available. Additional quantitative and qualitative analysis would be conducted to describe all other potential advantages and disadvantages of installing a traffic signal at this intersection.

Task 2.1.7 Deliverables

- Intersection Signal Analyses Technical Memorandum – draft & final (Word & 8.5x11 pdf)

Task 2.1.8 Traffic Signal Phasing Analysis (Optional)

This task would analyze the potential for improved traffic signal phasing to support pedestrians, bicycle travel, and transit vehicles in the vicinity of the construction site. For this scope of work, it is assumed that six (6) traffic signals will be included in the analysis. This would include the following tasks:

- Select a predominant construction phase that will be used as the basis for the traffic signal phasing analysis

- Gather existing traffic signal timing from the City of Fresno
- Estimate AM peak hour, mid-day peak hour, and PM peak hour vehicle turning movements for the intersections to be included in the study area
- Estimate AM peak hour, mid-day peak hour, and PM peak hour pedestrian, and bicycle counts for the intersections to be included in the study area
- Analyze alternative traffic signal phasing using the Synchro traffic signal timing program
- Make recommendations for improved traffic signal phasing and any associated hardware improvements necessary to implement the recommended phasing
- Consider other construction phases to determine whether the improved traffic signal phasing would be appropriate for implementation.

Task 2.2 Conceptual Design

Task 2.2.1 Utility Coordination - Utility A Letters

To verify the existence of utility facilities, the results of the Utility 'A' Letters previously sent out by the City will be reviewed involving: BNSF Signal, Sprint, Level 3, AT&T, Comcast, City of Fresno ITS, City of Fresno (Water/Sewer), Fresno Metropolitan Flood Control District, PG&E (Gas Distribution/Gas Transmission/Electric Distribution). The nominal budget for this task will provide for up to 2 additional 'A' Letters that may have been missed by the City and need to be sent.

A record map search will be performed as another measure to identify/verify the existence of utilities.

Task 2.2.2 Design Criteria Memorandum

The AECOM Team will prepare a design criteria memorandum that will summarize in detail what the controlling criteria will be to design this project. This memorandum will include criteria and design standards for:

- Structures design,
- Roadway design,
- Stormwater system,
- Sewer system, and
- Railroad design.

This memorandum will be submitted to the City for review and comments. Once finalized, the AECOM Design Team will use this memorandum as a guide throughout design.

Task 2.2.3 Alternatives Analyses (Conceptual Plans)

This task involves alternatives analyses for various disciplines involving – Utility Relocations, Shoofly Alignments, Roadway Profiles, Roadway Cross Sections, Traffic Handling Scenarios, Stormwater Pump Station Outfalls Options, Bridge and Retaining Wall Types, and Aesthetic Themes. Workshops with the City and Key Stakeholders will be held to evaluate the alternatives. These alternatives will be evaluated collectively or individually as needed. Design and contract plans will be developed utilizing AutoCAD Civil 3D 2016 for its capability with filesharing across the AECOM Team.

Utility Relocation Corridors

Six concept-level alternative alignment corridors have been identified for the realigning utilities located within the project area. We will coordinate with the City to determine final corridors to consider for alternatives analyses. The AECOM Team will study up to 6 corridors for utility relocation in and around the construction area of the grade separation construction limits. The study to relocate utilities will be performed at a concept level (10% design) as is needed to inform the alternatives analyses and alternatives selection. This concept design will include plan and profiles for up to 3 corridors for each of the utility types.

Wet utilities to be relocated include water mains (grid mains and the Regional Transmission Main (RTM)), sewer mains, telecommunication, gas, and electrical/power within Blackstone Avenue, McKinley Avenue, and Home Avenue. The study will include recommendations for locating a possible sewer pump station. The AECOM Team study will consider feasibility of the realignment within the defined corridors, constructability, engineering, and overall cost. Sewer realignment will consider gravity flow alignments as well as an alignment within the depressed roadway which will require a sewer pump station. This study will consider initial analyses of a sewer pump station. Dry utilities will be considered for relocation in the alternative alignment corridors. This study will reflect coordination with owners of each utility and will involve the following:

Potholing – The initial phase of utility potholing will occur during this study phase to initially locate utilities in critical locations that will influence concept design. It is assumed that approximately 10 potholes and 20 electronic detections (e-detects) for this study. Surveying of potholes will be performed by the City. This will need to be verified during the study phase and adjusted if needed. If more potholing and e-detects are required, additional funding could be obtained from the contingency budget.

Hydraulic Modeling – Hydraulic modeling will be performed for the potential alternate alignments for water and sewer mains to assist and determine the feasibility of relocation concepts. Hydraulic modeling will be completed for appropriate corridors and will alternatives with and without a sewer pump station. The modeling results will be summarized into a technical memorandum.

Pump Station – The AECOM Team will recommend locations for the sewer pump station and will prepare concept layouts for consideration by the City. The AECOM Team will meet with the City to review the SCADA system requirements and quantify the desired remote monitoring and control signal features to be implemented at the local level and at the SCADA HMI. This meeting will involve identifying the hardware and software preferences and options, as well as potential system pitfalls, and challenges. This meeting will culminate in a technical memorandum summarizing this coordination.

Utility Relocation Corridor Alternatives Analyses Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Roadway Realignments

AECOM will consider temporary realignments of Blackstone Avenue and McKinley Avenue into adjacent properties planned to be acquired with this project. Consideration of these temporary realignments will be centered on maintaining traffic on these

Avenues during construction. The required depressed roadway profile will influence the viability of this analysis.

Roadway Alignment Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Roadway Profiles

AECOM will evaluate vertical profiles for Blackstone Avenue involving a design speed of 40 mph given that the Mobility Strategy describes the City's plan to reduce the posted speed to 30 mph. McKinley Avenue will be evaluated for the design speed of 45 mph given the posted speed of 45 mph which will be maintained. These various design speeds will be applied to vertical profiles to evaluate the various impacts of each design speed. Vertical clearance requirements of the bridge underpasses will influence this evaluation which is dictated by bridge superstructure type or existing vertical clearances along the roadway corridor at the nearby freeways. Consideration will also be given to the possible benefits of reducing the roadway depression by raising the railroad track profile and lessen the extent of roadway conform limits. Each alternative will involve concept plan and profile.

Roadway Profiles Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Roadway Cross Sections

The AECOM Team will coordinate with City Departments to fully understand the goals and objectives of the City's Southern Blackstone Avenue Smart Mobility Strategy (Mobility Strategy) as it relates to the development of this project. Consideration will be given to minimize or avoid throwaway costs from constructing near-term features that would be reconstructed in the long-term implementation of this Mobility Strategy. This will involve designing a roadway that considers:

- Mobility strategy near-term (2 lanes + parking + bike lanes)
- AECOM near-term (3 lanes + Bike Lanes)
- Mobility strategy long-term (2 lanes + BRT + cycle track)

One typical section for each alternative on each road at the critical location of the BNSF underpass will be developed for each road.

Roadway Cross Sections Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Traffic Handling / Detours

The AECOM Team will coordinate with City Departments to evaluate a design that considers short-term and long-term roadway closures. The duration of roadway closures will define construction staging and traffic handling design and will influence construction duration and construction cost.

The short-term closure will limit roadway closures to three-weeks for McKinley and Blackstone Avenues for the construction of the grade separation. This 3-week period would need to occur during the City College Christmas Break. This will require detailed

staging and traffic handling planning to accommodate maintaining two lanes of traffic in each direction on Blackstone Avenue and one lane in each direction on McKinley Avenue.

The long-term closure durations could be 9 to 15-months for McKinley and Blackstone Avenues simultaneously or 6 to 12-months for the Avenues independently. This could result in shorter duration of overall construction of the grade separations and reduced construction cost. This will also require detailed staging and traffic handling planning. One concept layout will be prepared for each of the short-term and long-term alternatives.

Traffic Handling / Detours Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Bridge and Retaining Wall Types

AECOM will provide a Type Selection Memo in accordance with Caltrans MTD 1-29 for both bridges and the retaining walls alternatives. A General Plan and General Plan Estimate for up to two different bridge alternatives and three retaining wall alternatives will be included each report. The report will summarize how each alternative is impacted by the geotechnical recommendations, right-of-way, roadway alignment, railroad clearances, aesthetics, environmental constraints, seismic impacts, constructability, stakeholder requirements, schedule, and cost. General Plan Estimates will be prepared in accordance with Caltrans Bridge Design Aids (BDA) 11-4. A draft copy of each Type Selection Memo including General Plan sheets, cost estimate, Design Memo, and Preliminary Foundation Report (by others) will be submitted to the City, PDT members and key stakeholders for review.

AECOM will develop conceptual structures alternative designs consistent with Caltrans Information and Procedures Guide Section 4-2. The Type Selection Memo will include the following structures:

Bridge Structures (total 4):

1. Blackstone (Bridges 1 & 2) – a two-span underpass separation structure composed of 2 – 120-foot +/- single span, single track, 30-degree skew, ballasted, steel through plate girders (TPG) with bolted splice flanges, approximately 240 feet long. That will be constructed in two stages to facilitate continuity of rail operations.
2. McKinley (Bridges 3 & 4) – a two-span underpass separation structure composed of 2 single span, single track, 30-degree skew, ballasted, steel deck plate girders (DPG); 1 – 65-foot span and 1– 90-foot span. That will be constructed in two stages to facilitate continuity of rail operations.
3. Retaining Walls (RW), Locations A thru T (20 walls, with combined total length of approximately 7,268 feet +/-). The walls type for consideration include: Secant Pile Walls, Soil Nail Walls, Tie-Back, Grounded Anchor Walls, Cantilevered Soldier Pile Walls, CIP/RC Cantilevered Walls, or some combination of these types, to be determined during the type selection phase of the work.

The Type Selection Memo will include the following:

- General Description of the Project

- Structure Type Selection and Support Location Considerations for each structure
- Design and Constructability Issues
- Foundation Issues
- Speed of Construction
- Staged Construction of the Structures
- Preliminary Aesthetics
- Advance Planning Studies
- Construction Costs

A single alternative type selection study including the 4 bridge structures and the 20 retaining walls will be prepared in accordance with the requirements of the Caltrans' Memo to Designers (MTD) 1-29 and any applicable AREMA or BNSF Railway Guidelines.

The work includes the Advanced Planning Studies, Preliminary Foundation Reports. Both structural and visual design criteria will be used in developing General Plan details. This includes performing preliminary analysis to aid development of structural elements such as depth and type of the superstructure, size and shape of column members, footing sizes, and abutment types. The analysis will be consistent with the preliminary nature of design.

The Type Selection Memo will include discussions noted above and will consist of a type selection memo, and a vicinity map, General Plans, construction cost estimates, for each of the structures.

AECOM will be prepared to discuss and provide information on foundation requirements, falsework requirements, seismic and aesthetic considerations, traffic handling, construction cost and other pertinent information that is needed to determine the proper structure type. This is the "Structure Type Selection" process and no further design work will be performed until written approval of the structure type is received from the City. Bridge and Retaining Wall Types Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternatives for further design.

Shoofly Alignments

The AECOM Team will support the processing of encroachment permits with BNSF for performance of the design team's site investigations.

The AECOM Team will perform a site visit to observe existing conditions and review project goals and objectives with the project team. Detailed photo contact sheets will be prepared. Based on input from the City and project team, site investigations performed by others (survey, geotechnical and utility data) and applicable standards, we will prepare up to 3 alternatives for achieving the shoofly necessary for construction of the underpass.

The shoofly designs will be prepared as high-level concepts on a scroll print with profiles shown based on the topographic data provided. Preparation of separate drawing sheets for the shooflies is not included. Where appropriate, we will include a separate plan and profile drawing for the final condition, where the track restoration profile or alignment will be different from the existing condition. Each shoofly alternative

will involve one sheet of typical section(s), conceptual layout of the temporary at-grade crossings, and a description of construction phasing.

Variances of BNSF or other standards will be identified and discussed with the City for their merits and strategy to be pursued with BNSF.

Shoofly conceptual design will be evaluated with the structures, roadways and utilities. Evaluation of additional alternatives, including consideration of a jack-and-bore or push box alternative, and preparation of additional exhibits can be provided for an additional fee, if beneficial. This additional service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Three concept layouts and profiles will be prepared for 3 shoo-fly alternatives.

Shoofly Alignments Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Stormwater Pump Station Outfall

Three options for stormwater outfall have been identified. The AECOM Team will evaluate the three options which involve: the 30-inch storm pipe in McKinley Avenue, the 30-inch storm pipe in Blackstone Avenue, and to the Fresno Metropolitan Flood Control District (FMFCD) Drainage Area Basin CC directly and bypass existing conveyance systems.

Three primary criteria will influence the study of these options. The FMFCD limits the amount of flow into their conveyance system to 2-year event. The City requires that roadway projects convey a 50-year event. The balance between the 2-year event and the 50-year event will require a large sump to attenuate this volume of stormwater. When considering the outfall to Basin CC, this basin is at capacity and currently pumps into nearby Dry Creek, but the flow is restricted to 24 cfs per the Fresno Irrigation District (FID). The AECOM Team will coordinate with FMFCD, the City, and FID when analyzing these options.

Once a stormwater pump station site and the required stormwater pump station flow rate are determined, we will develop a concept site plan for the stormwater pump station locations. It is assumed that the alternative will be to discharge to Basin CC. Design will account for temporary bypass pumping which will be designed by the contactor.

Three alternatives will be studied that include development of concept plans and profiles for the outfall to the 30-inch storm pipe in McKinley Avenue, the 30-inch storm pipe in Blackstone Avenue, and to the Fresno Metropolitan Flood Control District (FMFCD) Drainage Area Basin CC directly and bypass existing conveyance systems.

Stormwater Pump Station Outfall Options Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternative for further design.

Aesthetic Themes

The AECOM Team will meet with the City to review examples of aesthetic treatments and themes and discuss the landscape and aesthetics and understand any concerns that will affect the design approach, schedule and budget.

Conduct a site visit to photograph the site, review existing conditions, and analyze areas where future improvements are anticipated. This information shall be formulated into an

existing conditions / site analysis diagram for use during public workshops. Photographs will be keyed into the drawings and will be available for use throughout the design process.

Participate / assist facilitating 1 stakeholder meeting to discuss aesthetic opportunities for the project. We will use this meeting to learn about the unique aspects that might influence the development of 3 theme alternatives.

Three aesthetic concept themes will be developed for the landscape and aesthetics based on information from City and stakeholders. The alternatives will identify the types of landscape and aesthetics site improvements with a description about concept. Each alternative will be distinct and offer a different approach to how site materials will be used. Elements that will be explored include but are not limited to:

- Bridge and retaining wall treatments/ patterns
- Design of public spaces/ plazas
- Pedestrian paving materials, seating materials, site furnishings imagery to support theming
- Plant materials / opportunities for art, landforms

The concept themes will include concept plans and three main entrance perspective sketches.

Aesthetic Themes Workshop – The AECOM Team will conduct a workshop with City departments to collectively evaluate the alternatives and for the City to select the alternatives for further design. Once the concepts have been vetted with key stakeholders, the concepts will be shared with the community as part of the planned community meetings.

Conceptual-Level Construction Cost Estimates

Each the above 7 discipline alternatives analyses will include a conceptual-level cost estimate to inform the alternatives evaluation and selections. Estimates will be based on industry standard practices for developing engineer's construction estimates utilizing Caltrans cost data, RSMeans and Saylor, bid results from recent similar projects, and by obtaining material costs from suppliers.

Task 2.2.4 City / PDT / Stakeholder Reviews

The results of the alternatives evaluation will be provided to the City, PDT members, and stakeholders for review and comment.

Task 2.2.5 Right-of-Way Needs Maps

AECOM will develop a right of way needs map for the City's use in developing the Appraisal Map including the following:

- ◆ Acquisitions and easements needed for utility contract
- ◆ Acquisitions and easements needed for grade separation contract

The City will be responsible for all Boundary Surveys and Research.

Task 2.2 Deliverables

- Utility 'A' Letters (8.5x11 pdf) by City, AECOM up to 2 additional
- Design Criteria Memorandum – draft & final (Word & 8.5x11 pdf & hard copies (6))
- Alternatives concept plans (plans, profiles, details & typical sections as appropriate) for each alternative analysis (11x17 pdf & hard copies (6))
- Bridge and Wall Type Selection Memorandum- draft and final (8.5 x 11 pdf & hard copies (6))

- Water/Sewer Modeling Technical Memorandum – draft & final (Word & 8.5x11 pdf & hard copies (6))
- Concept-Level Construction Cost Estimates (8.5x11 pdf & hard copies (6))
- Right of Way Needs Map (11x17 pdf)
- Pothole Locations Report (8.5x11 pdf) by City to AECOM

Task 2.3 Design Decision Document & Preliminary Engineering

Task 2.3.1 Design Decision Document

The results of the alternatives analyses will be summarized in a Design Decision Document that describes the processes exercised to evaluate the alternatives, the actions taken to develop the project to key decision points, the alternative selections, and the basis for the alternative selections. During the development of the Design Decision Document, design will be advanced to the concept grade separation and utility relocations to 20% for the grade separation and 50% for the utility relocation.

Task 2.3.2 20% Grade Separation Plans & 50% Utility Relocation (and Site Demolition – by City) Plans

This task involves advancing the selected alternatives further into preliminary design. This scope assumes that the utility relocation and property acquisition/site demolition will occur in advance of completing the grade separation design to clear the project area in preparation for the grade separation construction. It is assumed that the grade separation concept design and 50% utility relocation design will be performed concurrently, and that utility relocation will begin during the 60% Grade Separation PS&E task.

50% Regional Transmission Main & Water Main Designs

Design will generally include the following sheets: cover sheets, legend/note sheets, survey control sheets, utility crossing information sheets, plan and profile sheets, topographic and site plans, pump station layouts, mechanical sheets, structural sheets, civil details, corrosion protection details, and traffic control plans.

The AECOM Team has identified 2 possible alignment alternatives for realigning the RTM pipeline in McKinley Avenue – one that would realign the RTM around the grade separation site, and another within the grade separation site. It is assumed that the RTM will be relocated to the south side of McKinley Avenue within the depressed roadway.

The RTM will be designed consistent with the previous and recent RTM design of the same facility – cement-mortar lined and tape-coated welded steel pipe of the same size, including corrosion protection. Plan and profile sheets will be developed for the selected alignment option, as will various construction and civil details. Water grid mains will be included in this plan set as well and will be designed to be the same size and of the same materials as the existing mains.

50% design plans for the small diameter water main relocations located within Blackstone and McKinley Avenues will be developed.

50% Sewer Mains Design

The AECOM Team has identified 2 possible alignment alternatives for realigning the gravity sewer main pipeline in Blackstone Avenue – one that would realign the sewer around the grade separation site, and another within the grade separation site. It is assumed that the sewer will be relocated near the current alignment in Blackstone Avenue within the depressed roadway. This will involve a sewer pump station. The sewer mains will be designed to be constructed of Polyvinyl Chloride (PVC) pipe and will be a comparable size to the existing mains (sizes may vary based on materials and peak flows). The profile design will consider existing utilities and the slope to follow the depressed roadway profile. Design will account for temporary bypass pumping which will be designed by the contactor.

The AECOM Team will design relocation of the gravity sewer main in Home Avenue and will consider options for the existing 8-inch pipeline west of Blackstone Avenue.

50% Sewer Pump Station Design

The AECOM Team will design the sewer pump station based on the selected alternative alignment. The pump station will be designed for a flowrate of approximately 2,400 gallons per minute (gpm) and will consist of one below-grade circular concrete wet well with submersible non-clog pumps and below-grade concrete vaults for all valves, meters, pig launching stations and other required infrastructure. The wet well will be up to 12' in diameter with a flat concrete lid and aluminum access hatch. The wet well will be designed to have 2 to 3 pumps that are each capable of pumping at peak flowrate. All electrical infrastructure, including but not limited to Variable Frequency Drives (VFDs), Motor Control Center, SCADA facilities, and automatic transfer switch, will be installed outdoors within weatherproof cabinets. No above-ground structures are required. The pump station will also include a back-up generator with a sound-attenuating enclosure.

Odor control facilities will be designed to include factory assembled and skid mounted above-ground carbon canister odor control units and bioxide chemical storage tanks and feed pumps. An odor control study has been deemed not necessary for this project. It is not expected that emergency below-grade storage tanks are required to house wastewater in the event of a pump failure; the pump station will have full redundancy and will also include inlets and outlets to connect to a temporary trailer-mounted pump.

The pump station plans will be included in the 50% sewer utilities plans, and will include a topographic and demolition plan, a site grading plan, a site layout plan, mechanical drawings, structural drawings, pump station details, electrical and control design drawings and specifications.

A SCADA system block diagram will be prepared showing the proposed Instrument Control Panel interface with existing SCADA computer configuration, identifying hardware, and networking requirements. The latest generation of Programmable Logic Controller (PLC) will be utilized at the time of project bidding. A list of SCADA system hardware will be prepared summarizing the recommended PLC, Operator Interface, Telemetry, and networking hardware to be utilized.

New 480V electric service from PG&E to supply normal power will need to be established. AECOM will:

- Coordination with local utility company (PG&E) for new low voltage service connection
- New service application form completion and submittal
- Service Connection Design and Construction Documents

The utility coordination will be for both the stormwater and sewer lift station.

The sewer lift station is anticipated to be located along Blackstone Avenue near the new BNSF Underpass. The lift station will transfer sewerage from a sump back to the existing sewer main in Blackstone Avenue south of the Underpass. Its estimated capacity is 2,400 gpm. It is expected that there will be 2 - 480V pumps in the lift station that will be equipped with Variable Frequency Drives (VFD) and tied into the City's SCADA network. The electrical and control design deliverables for the sewer lift station are comparable to the stormwater pump station.

The sewer lift station may be avoided by rerouting sewer around the project site. However, the AECOM team is prepared to design the lift station and this system is assumed for this scope of work.

50% Dry Utilities Design (U)

It is customary for dry utility companies to perform their own design for their utilities. AECOM has design contracts with various dry utility companies and this experience is relevant to this project. This experience involves telecommunications, gas mains, and power/electric. Consequently, as an optional service, AECOM can perform the design of the relocation of the dry utilities to appropriate standards for the various utility companies to approve. This is offered as an optional service as a schedule risk mitigation strategy to deliver the project on time. This service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

50% Utility Relocation Technical Specifications (U)

Technical specifications will be prepared for each bid set and will be provided in CSI format.

50% Site Demolition (by City) (U)

This service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

20% Grade Separation Plans

After the alternatives' evaluations for the roads and bridges, comments will be addressed, and the concept design refined to present in the Design Decision Document.

20% Grade Separation & 50% Utility Relocation Design Construction Cost Estimates

A concept-level grade separation construction cost estimate will be prepared to the same level of detail for each alternative to support the alternatives evaluation. 50%

utility relocation construction estimates will be updated for the selected alternative's advanced design. Estimates will be based on industry standard practices for developing engineer's construction estimates utilizing Caltrans cost data, RSMeans and Saylor, bid results from recent similar projects, and by obtaining material costs from suppliers.

Task 2.3.3 Identify Long Lead Items and Strategies:

As long-lead items can influence project schedules, the AECOM Team will identify such items and manage each related item for timely resolution. Such items include:

- Utility relocations
- BNSF coordination
- Other agency coordination as needed
- Right-of-way needs
- Environmental impacts / permits
- Hazardous materials
- Special materials/equipment for construction – traffic/RR signals, controllers, cabinets, poles, vaults, etc. (for ordering materials)

Task 2.3.4 Legal Descriptions, Plats and Appraisal Map (by City)

Legal Descriptions, Plats and Appraisal Map

Legal descriptions and plats will be prepared to support the appraisal, acquisition of additional street right of way, easements, and temporary construction easements required for the project.

It is estimated that the City will prepare 9 plats and legal descriptions for partial right of way takes. A plat and legal will not be prepared for full takes. An additional 17 plats and legal descriptions is assumed for BNSF access and utility/retaining wall easements. TCEs or other maintenance needs to be determined during the design process. The scope also includes up to 9 "show me stakes" for properties during the acquisition phase.

Approximately 27 preliminary title reports will be necessary to prepare the land net and to properly identify the limits of the affected parcels. From these title reports, the City will plot existing easements within the proposed project design limits.

The City will perform a post-construction Record of Survey over the memorialized revised right-of-way boundary and set new monuments for the revised right-of-way.

Task 2.3.5 City / PDT / Stakeholder Reviews

The Design Decision Document and the results of the 20% grade separation design, and the 50% utility relocation design will be provided to the City, PDT members, and stakeholders for review and comment.

Task 2.3.6 Meet with City to Present Design Progress & Design Decision Document

Following the City, PDT, and stakeholder review period, we will meet with the City to present the design progress and Design Decision Document.

Task 2.3 Deliverables

- Design Decision Document (Word & 8.5x11 w/ 11x17 pdf & hard copies (6))
- 50% Plans for Sewer Relocation (11x17 pdf & hard copies (6))
- 50% Plans for Water Relocation (11x17 pdf & hard copies (6))
- 50% Technical Specifications (Word & 8.5x11 pdf & hard copies (6))
- Concept-Level Construction Cost Estimates (8.5x11 pdf & hard copies (6))

- Right of Way Appraisal Map (11x17 pdf) by City to AECOM
- Plats and Legal Descriptions (8.5x11 pdf) by City to AECOM
- "Show me stakes" by City

Task 2.3 Milestones

- ❖ Alternatives Selection
- ❖ BNSF Concept Design Report

**PHASE GS1 – 30% Grade Separation Plans and Acceptance
& PHASE U1 – 75% Utility Relocation Plans**

TASK 3 FINAL ENGINEERING

Upon selection of the alternatives for the various disciplines, final design will begin as described below.

Task 3.1 Finalize Studies and Reports

Task 3.1.1 Supplemental Ground Surveys (by City)

The City will provide supplemental ground surveys within BNSF right of way. All hard tie-in features such as top of rail, utility inverts, edges of buildings, building finished floor elevations and similar features shall be collected by ground survey methods.

The scope of supplemental ground survey includes the following:

- Existing tracks: survey a minimum of 1,000 feet of track beyond all proposed tie-in locations and 1,000 feet on either side of roadway crossings, including:
 - Elevations at the centerline top of single rail, or both rails in perpendicular pairs.
 - Elevations of both rails in perpendicular pairs where superelevation is present.
 - Maximum point spacing shall be 100 feet on tangent and 25 feet in curves or spirals, with a minimum of 5 points per curve.
 - All switches and derails with point of frog, point of switch and switch stand location, and turnout last longest tie.
 - Top and toe of ballast.
 - Top and toe of embankment and ditches.
- Existing buildings: survey all buildings within 25 feet of the proposed track improvements and buildings that abut the railroad right of way. Include building corners, edges of foundation, finished floor elevation, building overhangs, docks, stairs, downspouts, and any other similar projecting features.
- Existing bridges: inside face of bridge parapet (top and bottom), railing, sidewalk, bridge abutments, piers, and bridge soffit elevations.
- Existing at-grade crossings: gate arm locations, signal cabinets, edges of crossing panels, lane striping, and roadway signage.
- Existing drainage features: watercourses, surface drainage ditches and swales, existing culverts (size and invert elevation), existing detention/retention ponds, and other similar features.
- Existing surface features: driveways, edges of existing paving/gravel, fence lines and gates, top and toe of slopes, existing roads, existing trees, and other similar features.
- Existing surface utilities: utility manholes, valves, fire hydrants, light poles, guy wires, communication pull boxes, and other similar features.
- Existing overhead utilities: elevation of overhead lines at the sag point.
- Existing structures to be demolished: building corners, finished floor elevation, equipment foundations and surface utilities serving the building.

Task 3.1.2 Stormwater Prevention Pollution Plan (by City)

Projects that disturb one or more acres of soil are required to obtain coverage under the Construction General Permit (CGP) for discharges of stormwater associated with

construction activity. Activities such as clearing, grading, stockpiling and excavation are examples of ground disturbance activities requiring coverage under this permit. The CGP requires the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP describes requirements for monitoring the site prior to, during, and after rain events, implementing Best Management Practices (BMPs) to reduce the potential for non-stormwater discharging offsite, managing stormwater run-on and run-off, and for erosion and sediment control BMPs. The City will develop the SWPPP, provide weekly SWPPP inspections, perform required stormwater monitoring, make recommendations for BMP implementation, collect stormwater samples, prepare reports of SWPPP activities, and, if requested, enter project related documents into the Regional Water Quality Control Board (RWQCB) data portal, the Stormwater Multiple Application and Report Tracking System (SMARTS) in accordance with conditions of the CGP.

Task 3.1.3 Phase 2 Utility Detection and Potholing

Once the final corridor for utility relocation is selected, it is assumed that approximately 20 potholes and 40 e-detect locations will be performed for final design of the utility relocation, roadway and grade separation. Surveying of potholes will be performed by the City. If more potholing and e-detects are required, additional funding could be obtained from the contingency budget.

Task 3.1 Deliverables

- Property line and easement data (AutoCAD, Civil 3D) by City to AECOM
- Survey control information (AutoCAD, Civil 3D) by City to AECOM
- Survey legend and abbreviations (AutoCAD, Civil 3D) by City to AECOM
- Existing contours at 1-foot intervals (AutoCAD, Civil 3D) by City to AECOM
- Top of rail survey and other hard tie-in points (AutoCAD, Civil 3D) by City to AECOM
- Base survey map – signed and stamped (11x17 pdf & hard copies (2)) by City to AECOM
- Spot elevations (ASCII, PNEZD) by City to AECOM
- 3D breakline data/DTM (AutoCAD, Civil 3D) by City to AECOM
- SWPPP – draft & final (Word & 8.5x11 pdf) by City to AECOM
- Pothole location report (8.5x11 pdf & hard copies (6)) by City

Task 3.2 Right-of-Way Acquisition (by City)

Appraisals, acquisitions, and escrow services will be provided by the City. The AECOM Team can provide this service if desired by the City. This AECOM additional service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task 3.2 Milestones

- ❖ Right-of-Way Certification

Task 3.3 Obtain Permits

Task 3.3.1 Regulatory Permits

Incidental Take Permit (Optional)

An Incidental Take Permit (ITP) may be required for the project. In compliance with the California Department of Fish and Wildlife (CDFW) regulations, the ITP would allow for

any incidental observations of sensitive species or habitat to be handled with appropriate mitigation measures on the project site. Historically, Fresno had suitable habitat for several species that are listed as “threatened” or “endangered” on the California Endangered Species Act (CESA) such as the San Joaquin kit fox, Fresno kangaroo rat, and tricolored blackbird. Due to urban sprawl, the habitat that was viable for most species has been decimated and the sightings of sensitive species have been few and far between. However, with places like Woodrow and Roeding Parks and surrounding agricultural lands in Fresno County, endangered species populations such as the tricolor blackbird are thought to be present. Protected species may traverse the City of Fresno to travel to suitable habitat surrounding the City. If protected species are observed within, or proximal, to the Project footprint, an ITP may serve to protect the City and/or Contractor from liability if these species are harmed during construction. Should it become necessary, the AECOM Team will prepare an ITP application and communicate with CDFW to ensure agency compliance and species protection.

Task 3.3.2 Local Permits

The AECOM Team will work with the City to prepare a General Construction Permit following City guidelines.

Task 3.3 Deliverables

- Permit applications (8.5 x11 pdf & hard copies (6))

Task 3.4 30% Grade Separation & 75% Utility Relocation (& Site Demolition – by City)

Task 3.4.1 Utility Coordination - Utility B Letters

Once utilities have been generally identified by responses to ‘A’ Letters, field surveys and record searches, the information gathered will be incorporated into the project basemap and utility conflicts will be mapped. Following this action, Utility ‘B’ Letters will be issued to utility companies requesting conflict resolution plans.

Task 3.4.2 30% Grade Separation Plans

Roadway

The roadway design will proceed based on the selected alternatives for the Blackstone Avenue profile and cross sections.

The Title Sheet will include the appropriate City and federal funding project identification, as well as a sheet schedule, a vicinity map, the project legend, general notes, and the project control points.

The roadway Typical Section Sheet will include the roadway structural section as designed, based on a City supplied Traffic Index (TI) and the recommendations of the Geotechnical Report indicating the R-value.

Plan and Profile sheets will be produced. The plan view will delineate the general roadway improvements and pavement dimensions. Geometric information tied to the project control points will be shown to sufficiently describe both the horizontal and vertical alignments.

Drainage plans will be prepared including plans and profiles 30%, 60%, 90%, 100% and Final phases in accordance with City submittal requirements. Prepare drainage item bid quantities for each submittal. Prepare drainage specifications for each submittal.

Necessary approach roadway Construction Details will be initiated at appropriate scales. Utility locations, grading limits and geometric details will be shown. Specific improvement details may also be shown on any Construction Details.

Traffic handling details will be shown on relevant sheets. The plan will show route signage to be used during construction. Advisory and construction area signs (CAS) will be shown on a Construction Area Signs Sheet.

A signing, striping, and pavement marking plan will be developed utilizing City standard details and current Caltrans Traffic Manual, Sign Specifications, and Standard Plans, as applicable. Existing as well as new sign locations will be shown. Sign panels will be shown for new nonstandard signs. Standard signs will be designated by appropriate Caltrans standard sign numbers. Temporary signing and striping, portable delineators, temporary crash cushion arrays and temporary railing (Type K) will be shown, as necessary, on this plan. AECOM staff will work closely with the City staff to incorporate applicable requirements into the bridge plans.

Signal and Lighting, Streetlighting and Temporary Signal

Preparation of signal and lighting plans will include mapping of existing signal equipment based on as-built records, and preliminary proposed location of poles and major equipment including controller cabinet and service equipment enclosure based on 30% geometric design.

Preparation of streetlighting plans will include mapping of existing streetlights, and preliminary proposed streetlight locations.

Bridges & Retaining Walls

Upon selection of the structure alternative types, design will be advanced from the Advance Planning Study stage to the General Plan stage where Preliminary Construction Structure Quantity and Cost Estimates will be developed. The list of items of work will be prepared based upon Caltrans' Standard Items of Work and adding items as may be necessary to incorporate BNSF standard practices. The cost estimate will identify construction work items, quantities, unit costs, and summarize the estimated total structures cost, including allowances for supplemental work, owner furnished materials, expenses, mobilization and contingencies.

AECOM will furnish the City with appropriate copies of the General Plans. These will be distributed by the City for comments and comments received will be forwarded to AECOM.

Shoofly

The AECOM Team will advance the selected alternative to the 30% design level. The design submittal will include the required elements and meet applicable BNSF standards, including:

- Submittal checklist
- Shoofly plans and profiles
- Preliminary grading and drainage plans, including access roads
- Preliminary temporary at-grade crossing plans and profiles (2)
- Typical sections
- Cross sections – 100' stations
- Preliminary details

- Construction phasing and staging exhibit(s)
- Preliminary utility matrix of impact utilities within BNSF's ROW
- Geotechnical report
- Preliminary bridge plans and Type Selection Memo
- BNSF-centric basis of design narrative

BNSF will require one or more access roads to access their signal, track and other facilities. Access road will be illustrated on the grading and drainage sheets within the limits of the shoofly and BNSF's right-of-way.

The AECOM Team will provide a 30% submittal to BNSF for their review and comment. Up to 6 video conference calls with BNSF and the project team are anticipated during this 30% submittal process. The purpose of these meetings is to focus on identifying and resolving variances that may be required, identification of stakeholders, constraints and design challenges associated with the project, and developing specific solutions of mutual acceptability.

Stormwater Pump Station

The stormwater pump station is anticipated to be located along Blackstone Avenue near the new BNSF Underpass. The pump station will transfer stormwater to the FMFCD Basin CC. Its estimated capacity is 20,000 gpm. It is expected then that there will be 3 - 480V pumps in the pump station that will be equipped with Variable Frequency Drives (VFD) and tied into the City's SCADA network.

Preliminary design of the stormwater pump station will further evaluate the selected alternative and finalize any recommendations for final design. The preliminary electrical design package will include:

- One Line Diagram
- Electrical Site Plan

Aesthetic Preliminary Design

Based on the aesthetic alternative selected, the AECOM Team will address comments on concept plans and further develop the alternative to develop an overall site / grading plan for hardscape materials plaza areas, landscape areas, etc. associated with landscape improvements and where they interface with structures and roadways.

Prepare a landscape plan that identifies the location of trees, shrub massing, groundcover and planters will be prepared. This will be used to help establish irrigation requirements.

Enlarged plans at each main intersection, and perspective sketches at key locations highlighting the main design features.

Constructability Review

At the completion of the 30% Submittal, a constructability review will be performed by a qualified construction specialist with expertise in similar projects. Comments from this review will be used to refine the plans for the submittal. We will perform this review at this stage rather than the 90% stage as Constructability Reviews are more effective early in the plans development to avoid potential redesign work. Biddability is more important at the 90% stage as this is when the contract document is essentially complete and able to be reviewed for completeness, consistency, and thus biddability.

Task 3.4.3 30% Grade Separation Specifications Items List

The AECOM Team will provide a specifications items list which will serve as the basis for the construction estimate contract items list.

Task 3.4.4 30% Grade Separation Construction Cost Estimate

The AECOM Team will provide update the preliminary construction cost estimate. Unit prices will be applied to each contract item resulting in the Engineer's Construction Cost Estimate (ECCE). Estimates will be based on industry standard practices for developing engineer's construction estimates utilizing Caltrans cost data, RSMeans and Saylor, bid results from recent similar projects, and by obtaining material costs from suppliers, reflecting the location of the project and the quantity of each item.

Task 3.4.5 75% Utility Relocation PS&E

Wet Utility Relocation

Address 50% submittal comments and update to 75%. Provide additional detail sheets as needed. Update technical specifications, and updated Construction Cost Estimates.

Dry Utility Relocation

This service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task 3.4.6 75% Site Demolition PS&E (by City)

This service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task 3.4.7 Meet with City to Present Design Progress

The AECOM Team will meet with the City to present the progress of the 30% grade separation design and 75% utility relocation design.

Task 3.4.8 Draft BNSF Construction and Maintenance Agreement (by City)

Following BNSF's approval of the 30% plans, we will support the City's initiation of the construction and maintenance agreement. The AECOM Team will assist with coordination with BNSF stakeholders, providing technical design and railroad process counsel to the City and reviewing and providing comments on the draft agreement. The City and its attorneys will prepare all legal agreements and are responsible for execution of the ultimate agreement.

Task 3.4 Deliverables

- Utility 'B' Letters (8.5x11 pdf & hard copies (6))
- 30% Grade Separation Plans (8.5x11 pdf & hard copies (6))
- Aesthetic Site Plan, Main Entrance Plans (3 total) (11x17 pdf & hard copies (6))
- Aesthetic perspective sketches (3 total) (11x17 pdf & hard copies (6))
- 30% Grade Separation Specifications Items List (8.5x11 pdf & hard copies (6))
- 30% Grade Separation Engineers Construction Cost Estimate (8.5x11 pdf & hard copies (6))
- 30% Grade Separation Independent Construction Cost Estimate (8.5x11 pdf & hard copies (6))

- 75% Water and Sewer Relocation Plans (11x17 pdf & hard copies (6))
- 75% Water and Sewer Technical Specifications (8.5x11 pdf & hard copies (6))
- 75% Water and Sewer Cost Estimates (8.5x11 pdf & hard copies (6))
- Draft BNSF Construction and Maintenance Agreement (Word & 8.5x11 pdf) by City to AECOM

**PHASE GS2 – 60% Grade Separation Plans and Acceptance
& PHASE U2 – Final Utility Relocation Plans
& PHASE U3 – Utility Relocation Bidding, Construction Support & Closeout**

Task 3.5 60% Grade Separation & Final Utility Relocation (& Site Demolition – by City)

Task 3.5.1 Utility Coordination – Utility C Letters (U2)

Once conflict resolution plans have been received from utility companies, Utility 'C' Letters will be sent to the companies requesting conflict resolution by a certain date and will confirm liability for the resolution.

Task 3.5.2 60% Grade Separation Plans

The AECOM Team will address 30% plan comments and update to 60% status.

Roadway

Additional plan sheets will be incorporated including drainage plans and profiles that will maintain the existing drainage flow patterns. Water pollution control and erosion control/channel plans that will identify the required temporary and permanent BMP's to safeguard the creek from storm water run-off and erosion. The roadway design will be in accordance with the following standards:

- City of Fresno, Public Works Department, Standard Drawings, November 2011
- AASHTO, Geometric Design of Highways and Streets, 2018, 7th Edition
- Caltrans, Highway Design Manual, 7th Edition.

Signal and Lighting, Streetlighting and Temporary Signal

Signal and lighting plans will be revised based on 60% geometric design and updated to include underground conduit locations without conductor details and detection zones.

Streetlighting plans will be revised based 60% geometric design and updated to include approximate service equipment enclosure location and conduit runs.

Preparation of temporary signal plans for two stages with preliminary proposed location of poles and major equipment based on 60% stage construction layout.

Bridges & Retaining Walls

Upon approval of the Type Selection Memo and selection of structure alternatives, AECOM will proceed with the design of the underpass and retaining wall structures, creating design calculations, details and construction documents according to procedures and the design criteria decided upon at the project onset. The bridge and non-standard retaining wall plans, specifications and estimate will be prepared in accordance with the current edition of the following manuals:

- AREMA (current version)
- BNSF Bridge Design Standards
- AASHTO LRFD Bridge Design Specifications, 8th Edition with Caltrans Amendments
- Memo to Designers
- Bridge Design Aids
- Bridge Design Details
- Seismic Design Criteria (currently version 2.0)
- Standard Plans
- Standard Specifications
- Caltrans PS&E Guide

A standard set of Caltrans unedited contract structure specifications utilizing English units of measure will be prepared with standard structure special provisions utilized to the extent possible. Contract bid item list with quantities and unit prices updated from the Type Selection Memo will be developed. A copy of the complete 65% PS&E package will be submitted for review and comment from Caltrans and other reviewing agencies.

The Geotechnical Engineer will review the structure plans prior to the 60% Plan Submittal for compliance with the geotechnical recommendations.

Shoofly

The AECOM Team will coordinate with BNSF for submittal of the 60% plans for their review and comment. Up to 12 video conference calls with BNSF and the project team are anticipated during this 60% submittal design process. The purpose of these meetings is to focus on reviewing design progress and identifying and resolving any key issues.

Following BNSF's approval of the 60% submittal, we will draft and file the GO-88B with the CPUC. In addition to preparing the appropriate exhibits, we will engage the stakeholders to obtain their letters of concurrence or identifying any comments to be addressed for such concurrence. Additional design as may be required to obtain stakeholder concurrence shall be provided by the appropriate design team member.

Stormwater Pump Station

The pump station design will be advanced to include additional structural, mechanical, electrical and controls details. To support the electrical design, the following studies will be carried out using SKM PowerTools:

- Short circuit
- Protective Coordination Study
- Arc Flash
- Electrical Load Calc and Generator Sizing (non-SKM)

Aesthetic Design

The preliminary design will be advanced to enhance the site / grading plan for hardscape materials plaza areas, landscape areas, etc. and irrigation plans with landscaping/hardscaping details incorporated.

Constructability Review

At the completion of the 60% Submittal, a constructability review will be performed that will build off the previous 30% review to consider results of implementing 30% comments and advanced design. This review will be performed by a qualified construction specialist with expertise in similar projects. Comments from this review will be used to refine the plans for the submittal.

Task 3.5.3 60% Grade Separation Technical Specifications

Prior to the 60% PS&E Submittal, the plans will be reviewed by AECOM certified technical reviewers for each discipline and an updated contract items list will be produced. The technical specifications will then be compiled using the items list to collect and edit the latest Caltrans Standard Special Provisions (SSP's). The basis of the specifications will be the latest Caltrans Standard Specifications. Required mitigation measures and permitting requirements from the environmental permits will be included in the specifications.

Task 3.5.4 60% Grade Separation Construction Cost Estimate

The ECCE will be updated and differences will be further reconciled for maintaining a right sized project that is in line with the project budget.

An independent construction cost estimate (ICCE) performed by a qualified construction specialist with expertise in similar projects will be prepared commensurate to a 60% estimate. This estimate will be prepared based on construction resource and equipment loading. This ICCE and ECCE will be compared for differences reconciled for establishing a higher probability of construction costs for budgeting purposes and right sizing the project.

Task 3.5.5 Final Utility Relocation PS&E

Wet Utility Relocation

Address 75% submittal comments and update to Final. Provide additional detail sheets as needed. Update technical specifications, and updated construction cost estimates.

Final Anticipated Plan Sheet List

- Water Utility Plans
 - Title Sheet
 - Sheet Index
 - Legend
 - Notes
 - Survey Control
 - Utility Crossing Information
 - Plan and Profile Sheets
 - RTM Pipeline (4)
 - Water Mains (McKinley) (4)
 - Water Mains (Blackstone) (5)
 - Civil Detail Sheets (8)
 - Corrosion Protection Sheets (4)

- Sewer Utility Plans
 - Title Sheet
 - Index Sheet
 - Legend
 - Notes
 - Survey Control
 - Utility Crossing Information
 - Plan and Profiles
 - Sewer in McKinley (4)
 - Sewer in Blackstone (5)
 - Sewer in Home Street
 - Civil Details (6)
 - Sewer Pump Station Sheets
 - Site Plan
 - Topo/Demo Plan (2)
 - Grading Plan
 - Piping Plan
 - Force Main Plan and Profile Sheets (4)
 - Piping Sections
 - Wet Well Sections
 - Valve Vault Details (2)
 - Odor Control Units Details (4)
 - Construction Details (9)
 - Communication Block Diagram
 - Piping and Instrument Diagram
 - Control Panel Schematics
 - Motor Control Schematics
 - CCTV Camera Site Plan
 - Instrumentation Details 1
 - Instrumentation Details 2
 - Conduit and Conductor Schedule
 - Panel Schedule
 - Details No. 1 through 4
 - Electrical Site Plan
 - Single Line Diagram
 - Conduit Plan
 - Electrical Details
 - Switchboard and Motor Control Center Elevations
 - Electrical Wiring Diagrams
 - Conduit and Wire Schedule
 - Site Lighting
 - Electrical Equipment List

Dry Utility Relocation (Optional)

This service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task 3.5.6 Final Site Demolition PS&E (by City)

This service would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task 3.5.7 Utility Relocation (and Site Demolition – by City)
Bidding/Construction Support (U3)

Bidding Support

The AECOM Team will assist the City with bidding services that will include attending pre-bid meeting, responding to bidder questions/requests for information (RFIs), issuing addenda as may be needed, and assisting the City with bidder evaluations.

Construction Support

The AECOM Team will assist the City with construction services that will include attending pre-construction meeting, responding to contractor RFIs, review shop drawings and product information, and attend monthly construction meetings.

Task 3.5.8 Meet with City to Present Grade Separation Design Progress

The AECOM Team will meet with the City to present the progress of the 60% grade separation design and Final utility relocation design and to support the City in entering the utility relocation construction phase.

Task 3.5.9 60% BNSF Design Review Meeting

The AECOM Team will organize and lead up to 2 in-person review meetings with BNSF to walkthrough the plans and calculations of all project elements requiring their review and approval.

Task 3.5 Milestones

- ❖ Utility Relocation
- ❖ Site Demolition
- ❖ Draft General Order 88-B

Task 3.5 Deliverables

- Utility 'C' Letters (8.5x11 pdf & hard copies (6))
- 60% Grade Separation Plans (8.5x11 pdf & hard copies (6))
- 60% Aesthetic Plans (11x17 pdf & hard copies (6))
- 60% Grade Separation Technical Specifications (8.5x11 pdf & hard copies (6))
- 60% Grade Separation Engineers Construction Cost Estimate (8.5x11 pdf & hard copies (6))
- 60% Grade Separation Independent Construction Cost Estimate (8.5x11 pdf & hard copies (6))
- Final Water and Sewer Relocation Plans (11x17 pdf & hard copies (6))
- Final Water and Sewer Technical Specifications (8.5x11 pdf & hard copies (6))
- Final Water and Sewer Cost Estimates (8.5x11 pdf & hard copies (6))
- BNSF meeting agenda & notes (8.5x11 pdf & hard copies (6))

PHASE GS3 – 90% Grade Separation Plans and Acceptance

Task 3.6 90% Grade Separation Plans Specifications and Estimate

Task 3.6.1 90% Plans

The AECOM Team will address 60% PS&E comments and update to 90% status for the following discipline areas:

Roadway

Signal and Lighting, Streetlighting and Temporary Signal

Bridge and Retaining Wall Design Check

AECOM will independently check the Unchecked Details prepared for the 60% submittal in accordance with the procedures implemented at Caltrans' Division of Structures. A registered civil engineer will develop his own calculations, computer runs, etc., to check the bridge layout and structural integrity. A plan set will be marked up in two colors, yellow indicating approved items and red indicating questions or deficiencies. The checker and designer will then work jointly to reconcile the comments and the needed plan changes will be made resulting in the Checked Details.

Shoofly

Stormwater Pump Station

Aesthetic Design

Biddability Review

A constructability review was performed by a qualified construction specialist with expertise in similar projects at the completion of the 30% Submittal for the benefits previously noted. A biddability review will be performed by a qualified construction specialist with expertise in similar projects at this point that checks, plans against the specifications for bid items, specifications against the quantities for measurement and payment, and the estimate against the quantities for appropriate unit cost determinations when items are measured and paid for as another item of work or fully compensated into another item. The purpose of this task is to review for completeness, consistency, and thus biddability.

Task 3.6.2 90% Specifications

Prior to the 90% PS&E Submittal, the plans will be reviewed by AECOM certified technical reviewers for each discipline and an updated contract items list will be produced. AECOM will update the technical specifications prepared during the 90% phase as needed. The technical special provisions will then be compiled with City supplied boilerplate specifications, including Section 4, order of work, time of completion, etc. It is assumed that the City will prepare the "boiler plate" documents, including the notice to bidders, proposal, bond forms, and agreement. Required mitigation measures and permitting requirements from the environmental permits will be confirmed as included.

Task 3.6.3 90% Construction Cost Estimate

Two independent sets of bridge and retaining wall quantity calculations will be prepared by individuals experienced in this work. The quantity calculations will be organized and detailed for use by field inspectors during construction. Standard Caltrans summary sheets will be used for bridge and road quantity calculations, aiding in facilitating the review process and use by the construction personnel. Bridge and retaining wall quantity estimators must agree within tolerances prescribed in Chapter 11 of the Caltrans Bridge Design Aids Manual. Any deviations will be resolved, and the Marginal Estimate sheet will be prepared.

The ECCE will be updated.

Task 3.6.4 Primary Task Construction Schedule

The AECOM Team will prepare a construction schedule based on primary tasks and by a qualified construction specialist with expertise in similar projects. This schedule will be prepared by Primavera 6 (P6).

Task 3.6.5 Meet with City to Present Design Progress

The AECOM Team will meet with the City to present the progress of the 90% grade separation design.

Task 3.6 Deliverables

- 90% Grade Separation Plans (11x17 pdf & hard copies (6))
- 90% Grade Separation Specifications (8.5x11 pdf & hard copies (6))
- 90% Grade Separation Engineers Construction Cost Estimate (8.5x11 pdf & hard copies (6))
- 90% Grade Separation Independent Construction Cost Estimate (8.5x11 pdf & hard copies (6))

PHASE GS4 - Final Grade Separation Plans and Acceptance

Task 3.7 Final Grade Separation Construction Documentation

Address 100% plan comments and update to Final (Ready to Advertise) status.

Task 3.7.1 Final Plans

Preparation of the final construction documents will include, addressing the Draft Final Review Comments, final QA/QC, signed technical specifications and a construction cost estimate. This Final PS&E will be submitted to the City for Council Approval to advertise for construction.

Final Approximate Plan Sheet List

- Title Sheet
- Roadway Plans
 - Typical Sections
 - Horizontal and Vertical Control (2)
 - Key Map
 - Layouts (9)
 - Construction Details- Intersections (6)
 - Construction Details -Miscellaneous (6) Drainage Plans (9)
 - Drainage Profiles (6)
 - Drainage Details (4)
 - Temporary Water Pollution Control Plans (20)
 - Temporary Water Pollution Control Details (4)

 - Erosion Control Plans and Details (5)
 - Utility Plans (included in layouts)
 - Stage Construction (20)
 - Construction Area Signs
 - Traffic Handling Plans (36)
 - Traffic Handling Sections (8)
 - Traffic Handling Details (4)
 - Detour Plans (4)
 - Construction Area Signs
 - Pavement Delineation Plans (9)
 - Pavement Details (3)

- Signs Plans (9)
- Sign Details (1)
- Retaining Wall Plans/Elevations- Standard A, D thru H, J thru L, N & O (15)
- Retaining Wall Details (5)
- Surface Treatment Plans and Details (8)
- Site Furnishing Plans and Details (4)
- Electrical Plans
- Landscaping Plans
- Irrigation Plans
- Irrigation Schedule
- Plant List and Specifications
- Planting Plans
- Irrigation Enlargements
- Planting Enlargements
- Bridge Plans- Blackstone Avenue Underpass
 - General Plans and Elevations
 - Index to Plans & General Notes
 - Structure Plan 1- Stage 1 & 2
 - Deck Contours
 - Foundation Plan- Stage 1 & 2 (2)
 - Abutment 1 & 3 Layouts (2)
 - Abutment Details No. 1 & 2 (2)
 - Bent 2 Layout
 - Bent 2 - Details (2)
 - Typical Section
 - Framing Plan
 - Girder Elevations (2)
 - Girder Sections & Details (4)
 - Walkway & Ballast Plate Plan & Details (2)
 - Miscellaneous Girder Details (3)
 - TPG Bearing Details
 - End Floor Beam Bearing Details
 - Bridge Deck Waterproofing Layout & Details
 - Miscellaneous Details (2)
 - Approach Slab Layout & Details
 - Typical Drainage Details
 - Architectural Details No. (6)
 - Log of Test Borings (2)
- Bridge Plans – McKinley Avenue Underpass
 - General Plans and Elevations
 - Index to Plans & General Notes
 - Structure Plan
 - Deck Contours
 - Foundation Plan - Stage 1 & 2 (2)
 - Abutment 1 & 3 Layouts (2)
 - Abutment Details No. 1 & 2 (2)
 - Bent 2 Layout
 - Bent 2 Details (2)
 - Typical Section
 - Miscellaneous Typical Sections
 - Framing Plan
 - Girder Elevations (2)
 - Girder Sections & Details (4)
 - Walkway & Ballast Plate Plan & Details (2)
 - Miscellaneous Girder Details
 - DPG Bearing Details

- End Floor Beam Bearing Details
- Bridge Deck Waterproofing Layout & Details
- Miscellaneous Details (2)
- Approach Slab Layout & Details
- Typical Deck Drainage Details
- Architectural Details No. (6)
- Log of Test Borings (2)
- Retaining Wall Plans – Special
 - Retaining Wall Layouts – Special – B, C, I, M, P thru T (31)
 - Retaining Wall Details – Secant Pile Walls (4)
 - Retaining Wall Details – Grounded Anchor Walls (4)
 - Retaining Wall Details – CIP/RC Cantilevered Walls (4)
 - Retaining Wall Drainage Details (2)
 - Retaining Wall Miscellaneous Drainage Details (2)
 - Architectural Details No. (2)
 - Log of Test Borings (8)
- Stormwater Pump Station Plans
 - Title Sheet
 - Sheet Index
 - Notes
 - Survey Control
 - Utility Crossing Information
 - Force Main Plan and Profile Sheets (4)
 - Site Plan
 - Topo/Demo Plan (2)
 - Grading Plan
 - Piping Plan
 - Piping Sections
 - Wet Well Sections
 - Valve Vault Details
 - Construction Details (9)
 - Switchboard and Motor Control Center Elevations
 - Legend and Symbol Sheet
 - Communication Block Diagram
 - Piping and Instrument Diagram
 - Control Panel Schematics
 - Motor Control Schematics
 - CCTV Camera Site Plan
 - Instrumentation Details 1
 - Instrumentation Details 2
 - Conduit and Conductor Schedule
 - Panel Schedule
 - Details No. 1 through 4
 - Electrical Legend, Abbreviations, and Symbols
 - Electrical Site Plan
 - Single Line Diagram
 - Conduit Plan
 - Electrical Details
 - Electrical Wiring Diagrams
 - Conduit and Wire Schedule
 - Site Lighting
 - Switchboard and Motor Control Center Elevations
 - Electrical Equipment List
- Railroad Plans

- Submittal checklist
- Shoofly plans and profiles
- Grading and drainage plans, including access roads
- Typical sections
- Cross sections – 100' stations
- Track and civil details
- Drainage report
- Restoration plans and profiles
- Temporary at-grade crossing plans (2)
- Construction phasing and staging exhibit(s)
- Demolition plans
- Utility matrix
- Geotechnical report (coordinated with AECOM)
- Bridge plans and calculations (coordinated with AECOM)
- Details of any significant shoring, falsework and erection, as known
- BNSF-centric basis of design narrative (coordinated with AECOM)

Task 3.7.2 Final Technical Specifications

AECOM will update the technical specifications prepared during the 100% phase as needed. The technical special provisions will then be compiled with City supplied updated boilerplate specifications, including Section 4, order of work, time of completion, etc. It is assumed that the City will prepare the "boiler plate" documents, including the notice to bidders, proposal, bond forms, and agreement. Required mitigation measures and permitting requirements from the environmental permits will be confirmed as included.

Task 3.7.3 Final Construction Cost Estimate

The ECCE will be updated, and differences will be further reconciled for maintaining a right sized project that is in line with the project budget.

Task 3.7 Milestones

- ❖ Grade Separation PS&E Certification
- ❖ BNSF Plan Approval
- ❖ Approved General Order GO 88-B

Task 3.7 Deliverables

- Final Grade Separation Plans (11x17 pdf & hard copies (6))
- Final Grade Separation Plans (full-size vellum)
- Final Grade Separation Technical Specifications (8.5x11 pdf & hard copies (6))
- Final Grade Separation Construction Cost Estimate (8.5x11 pdf & hard copies (6))

TASK 4 CONSTRUCTION SUPPORT

Given the uncertain nature of construction, these construction support services are approximately budgeted and will be revisited with the City upon the project's development through Task 3 and renegotiated if necessary. These construction support services may include the following tasks:

**PHASE GS5 – Grade Separation Bidding Support, Construction Support,
Record Drawings & Close Out**

Task 4.1 Bidding and Award Services

AECOM will provide bidding assistance to the City. This will include consultation and interpretation of the contract documents and assisting the City in preparing addenda to the PS&E and attending pre-bid or construction meetings and bid openings.

The Project Team will be available to aid the City, as required, during bidding of the project. This could include answering questions from perspective bidders, assisting the City in the preparation of addenda to the PS&E during the advertisement period, and providing consultation and interpretation of the construction documents. Since the City is the primary point of contact and response, we have assumed an on-call role for this task. Upon authorization from the City, following Scope-of-Work and Budget allocations, the Team will provide any engineering services the City may need during bidding and award phase. Bidding and Award Services could be summarized as follows:

Task 4.1.1 Respond to requests for information (RFI's)

Task 4.1.2 Prepare Addenda

Task 4.1.3 Attend Bid Opening and Assist City with Bid Analysis

Task 4.1 Deliverables

- Response to RFI's
- Addenda as needed

NOTICE TO PROCEED 5 – CONSTRUCTION SUPPORT

Task 4.2 Construction Support

Construction support during construction is considered an Construction Engineering (CE) Phase with FHWA and Caltrans and requires a separate scope and contract following the Preliminary Engineering (PE) Phase. The Project Team can provide engineering assistance to the City, on an on-call as-needed basis during construction phase of the project. Construction Support could include:

Task 4.2.1 Attend Preconstruction, Kick-off and Partnering Meeting

Task 4.2.2 Review Shop Drawings and Schedules

Task 4.2.3 Respond to RFI's

Task 4.2.4 Review Contract Change Orders

Task 4.2.5 Prepare Record Drawings

Task 4.2.6 Project Close Out

Task 4.2 Deliverables

- Response to RFI's
- Shop Drawing review response (8.5x11 pdf)
- Record Drawings (AutoCAD and Full Size Mylar)

Task 4 Milestones

- ❖ Bid and Award Construction
- ❖ Project Close Out

TASK X – OPTIONAL SERVICES

These services would be provided upon negotiation of additional scope and fee and upon separate notice to proceed. Funding could be obtained from the contingency budget for this service.

Task X.1 Dry Utility Relocation Design

Task X.2 Site Demolition Services

Task X.3 Sewer/Water Distribution System Modeling

Task X.4 Parking Study for Construction Impacts to College Access

Task X.5 Intersection Signal Analyses – Blackstone/University

Task X.6 Traffic Signal Phasing Analysis

Task X.7 Signal and Lighting at Blackstone/University

(30%/60%/90%/100%/Final)

Task X.8 Two Pedestrian Signals with RRFB (30%/60%/90%/100%/Final)

Task X.9 Sewer Main Flow Monitoring

Task X.10 Outreach Synopsis Report

SCOPE OF WORK ASSUMPTIONS

1. One stormwater pump station is required.
2. The survey data will be tied to the North American Datum of 1983 (NAD83) and the North American Vertical Datum of 1988 (NAVD88).
3. Cost of City right-of-way encroachment permit will be waived.
4. The City will obtain "Permit to Enter/Survey" for all parcels affected by this project.
5. A "Flag Person" will be required to work within the BNSF Right-of-way. The coordination and cost will be borne by the City.
6. The City will prepare legal descriptions and plats in support of right-of-way acquisitions.
7. The City will provide the title reports required for the project to support the compilation of the land net and plotting easements of record.
8. The City Survey Team will perform all topographic and boundary surveying.
9. The City Survey Team are certified to work within the BNSF right-of-way. If not, the AECOM Team can perform those services as additional services.
10. Project duration through Final Grade Separation Construction Documentation (ready to advertise) is anticipated to be up to 34 months.
11. No design exceptions are expected. If required, the design exceptions will be provided as additional services.
12. City will provide as-built drawings, reports, and or studies as exist for projects within the vicinity or this project including geotechnical data, initial site assessments (Phase 1 and Phase 2), design plans, maintenance reports, hydraulic studies, etc.
13. City Encroachment and Well Construction Permit fees will be waived.
14. Borings will be allowed to be performed within daylight hours between 7AM and 4PM.
15. Borings will not be necessary within the railroad right-of-way to avoid obtaining a BNSF Railroad Access Agreement.
16. Near site benchmarks or other temporary reference elevations will be provided by the City.
17. Environmental liens search will not be conducted for the project Site.
18. The *Optional IAW* does not include an assessment for asbestos-containing building materials, radon, lead-based paints, lead in drinking water, molds and mildews, indoor air quality, cultural and historic resources, ecological resources, wetlands, threatened or endangered species, industrial hygiene, health and safety, and other Standard Practice non-scope considerations.
19. The project is Statutorily Exempt Pursuant to Article 18 of the State of CEQA Guidelines and Section 21080.13 of the California Public Resources Code and no additional environmental studies are required.
20. Traffic analysis is only necessary for estimating construction related traffic circulation impacts and identifying potential mitigation strategies.
21. No streetlighting analysis of spacing required. Streetlighting spacing will follow the placement guidance of the City of Fresno Public Works Department Standard Drawings.
22. The removal and modification of the existing railroad crossing signals will be prepared by BNSF. Designer of signal and lighting, permanent and temporary, will coordinate with the railroad company

for railroad pre-emption, signal phasing and depicting design by the railroad company on the grade separation submittal as construction by others.

23. Review comments from City staff on deliverables will be consolidated with any conflicts resolved prior to issuing to AECOM and one round of reviews will occur for each deliverable.
24. Storm Drain System Modeling will be performed by the Fresno Municipal Flood Control District with hydrologic and hydraulic data provided by AECOM.
25. The actual Task costs may differ from task to task from that proposed in the fee proposal, but the overall fee will not be exceeded unless additional work is requested and approved by the City. Any additional work scope and fee will be negotiated with the City prior to such work being performed.
26. Construction Cross Sections and staking notes are not included.
27. Construction staking is not included.
28. Roundabout design and realigned college access road not included.
29. Approximately 20 pothole locations and 40 e-detects for alternatives evaluation will be provided to the City Survey Team for staking. The City will utilize the survey data for processing and updating the topographic drawings.
30. Approximately 40 potholes and 80 e-detect location will be provided for the final utility corridor selection. The City will utilize the survey data for processing and updating the topographic drawings.
31. The utility relocation and property acquisition/site demolition will occur in advance of completing the grade separation design to clear the project area in preparation for the grade separation construction.
32. The grade separation concept design and 50% utility relocation design will be performed concurrently, and that utility relocation will begin during the 60% Grade Separation PS&E task.
33. The RTM will be relocated to the south side of McKinley Avenue within the depressed roadway.
34. The sewer will be relocated near the current alignment in Blackstone Avenue within the depressed roadway. This will involve a sewer pump station.
35. An odor control study is not included.
36. Emergency below-grade storage tanks are not required to house wastewater in the event of a pump failure; the pump station will have full redundancy and will also include inlets and outlets to connect to a temporary trailer-mounted pump.
37. Stormwater pump station will discharge to FMFCD basin CC, approximately ¼ mile to the southeast of the project site.
38. Design will consider temporary bypass pumping of sewer and water that will be designed by the contractor.
39. AECOM will provide the City with Technical Specifications. The City will prepare the front-end/boiler plate specs with technical input from AECOM.
40. Combined construction contract documents will be prepared for the water and sewer relocation.
41. Attendance at bid opening will not be required.
42. Construction inspection services are excluded.
43. Construction materials testing is excluded.
44. Railroad signal design shall be by BNSF.
45. Traffic signal preemption design shall be by City or others.
46. Payment of all plan check, permit and filing fees will be paid by City.
47. The City will provide Assessor's Parcel Number or physical site address.

48. Regarding the ~~Final~~ Phase I ESA, water well information other than location and identification is not included.
49. Civil 3D Modeling not submitted.
50. Roadway realignment will be studied but not designed.
51. 8.5 x 11 and 11x17 prints for public outreach related events will be by the City. AECOM will provide electronic document to City for printing.
52. Industry spur and siding are out of service and will not influence shoofly design.

Exhibit B

INSURANCE REQUIREMENTS
Consultant Service Agreement between City of Fresno ("CITY")
and AECOM Technical Services, Inc. ("CONSULTANT")
BNSF Blackstone McKinley Grade Separation
PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
2. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto). If personal automobile coverage is used, the CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers are to be listed as additional insureds.
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT'S profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below, and any such insurance required by BNSF. However, insurance limits available to CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

1. **COMMERCIAL GENERAL LIABILITY:**
 - (i) \$2,000,000 per occurrence for bodily injury and property damage;
 - (ii) \$2,000,000 per occurrence for personal and advertising injury;
 - (iii) \$4,000,000 aggregate for products and completed operations; and,

- (iv) \$4,000,000 general aggregate applying separately to the work performed under the Agreement.

2. **COMMERCIAL AUTOMOBILE LIABILITY:**

\$1,000,000 per accident for bodily injury and property damage.

3. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.

4. **EMPLOYER'S LIABILITY:**

- (i) \$1,000,000 each accident for bodily injury;
- (ii) \$1,000,000 disease each employee; and,
- (iii) \$1,000,000 disease policy limit.

5. **PROFESSIONAL LIABILITY** (Errors and Omissions):

- (i) \$5,000,000 per claim/occurrence; and,
- (ii) \$10,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY'S Risk Manager or his/her designee. At the option of the CITY'S Risk Manager or his/her designee, either:

- (i) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers; or
- (ii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY'S Risk Manager or his/her designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

1. CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations by use of ISO Form CG 20 10 11 85 or both CG 20 10 10 01 and CG 20 37 10 01 or by an executed manuscript insurance company endorsement providing additional insured status as broad as that contained in ISO Form CG 20 10 11 85.
2. The coverage shall contain no special limitations on the scope of protection afforded to CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
3. For any claims relating to this Agreement, CONSULTANT'S insurance coverage shall be primary insurance with respect to the CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers shall be excess of CONSULTANT'S insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY and Fresno County Transportation Authority, their officers, officials, employees, agents and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

1. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended

reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.

4. A copy of the claims reporting requirements must be submitted to CITY for review.
5. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate side agreement with the City to provide required indemnification and insurance protection. Any required

side agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no side agreement is required, CONSULTANT shall require and verify that subcontractors maintain insurance meeting all the requirements stated herein and any such insurance and indemnification as may be required by BNSF and CONSULTANT shall ensure that CITY, its officers, officials, employees, agents, and volunteers are additional insureds. The subcontractors' certificates and endorsements shall be on file with CONSULTANT, and CITY, prior to commencement of any work by the subcontractor.

**Exhibit B-1
JMA Civil Side Agreement**

AGREEMENT

THIS AGREEMENT (Agreement) made and entered into as of this ____ day of April 2021, entered into between the City of Fresno, a municipal corporation (City), and JMA Civil (Contractor).

RECITALS

City and AECOM Technical Services., (Consultant) entered into a Consultant Services Agreement, (Agreement) on or about April 9, 2021, which requires Consultant to provide certain insurance and indemnity to the City; and

This Agreement requires the Contractor to provide insurance indemnify, hold harmless, and defend City; and

The City and Contractor desire to enter into this Agreement to comply with any and all insurance requirements as dictated in the Agreement with the Consultant.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. To the furthest extent allowed by law including California Civil Code section 2782, Contractor shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, Contractor or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. Contractor's obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If Contractor should subcontract all or any portion of the work to be performed under this Contract, Contractor shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

Contractor is responsible for any and all insurance and indemnification required by BNSF. If Contractor should subcontract all or any portion of the work

performed under this Contract, Contractor shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

2. Contractor shall comply with the insurance requirements as described in **Attachment A**, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

City:
City of Fresno,
A California municipal corporation

Contractor:
[Contractor name and business entity
type]

By: _____
Thomas Esqueda,
City Manager

By: _____

Name: _____

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

Title: _____
(If corporation or LLC., Board Chair, Pres.
or Vice Pres.)

By: _____
Kristi M. Costa Date
Deputy City Attorney

By: _____

Name: _____

ATTEST:
YVONNE SPENCE, CRM MMC
City Clerk

Title: _____
(If corporation or LLC., CFO, Treasurer,
Secretary or Assistant Secretary)

By: _____
Date
Deputy

Attachment: Attachment A

ATTACHMENT A

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY")
and AECOM Technical Services, Inc. ("CONSULTANT")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

5. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
6. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
7. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
8. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

4. COMMERCIAL GENERAL LIABILITY:

- (v) \$1,000,000 per occurrence for bodily injury and property damage;
- (vi) \$1,000,000 per occurrence for personal and advertising injury;
- (vii) \$2,000,000 aggregate for products and completed operations; and,
- (viii) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

5. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
6. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
7. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (iii) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (iv) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

4. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

5. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
6. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

6. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
7. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
8. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
9. A copy of the claims reporting requirements must be submitted to CITY for review.
10. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY

under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

Exhibit B-2
Blair, Church & Flynn Side Agreement

AGREEMENT

THIS AGREEMENT (Agreement) made and entered into as of this ____ day of April 2021, entered into between the City of Fresno, a municipal corporation (City), and Blair, Church & Flynn (Contractor).

RECITALS

City and AECOM Technical Services., (Consultant) entered into a Consultant Services Agreement, (Agreement) on or about April 9, 2021, which requires Consultant to provide certain insurance and indemnity to the City; and

This Agreement requires the Contractor to provide insurance indemnify, hold harmless, and defend City; and

The City and Contractor desire to enter into this Agreement to comply with any and all insurance requirements as dictated in the Agreement with the Consultant.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. To the furthest extent allowed by law including California Civil Code section 2782, Contractor shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, Contractor or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. Contractor's obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If Contractor should subcontract all or any portion of the work to be performed under this Contract, Contractor shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

Contractor is responsible for any and all insurance and indemnification required by BNSF. If Contractor should subcontract all or any portion of the work

performed under this Contract, Contractor shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

2. Contractor shall comply with the insurance requirements as described in **Attachment A**, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

City:
City of Fresno,
A California municipal corporation

Contractor:
[Contractor name and business entity
type]

By: _____
Thomas Esqueda,
City Manager

By: _____

Name: _____

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

Title: _____
(If corporation or LLC., Board Chair, Pres.
or Vice Pres.)

By: _____
Kristi M. Costa Date
Deputy City Attorney

By: _____

Name: _____

ATTEST:
YVONNE SPENCE, CRM MMC
City Clerk

Title: _____
(If corporation or LLC., CFO, Treasurer,
Secretary or Assistant Secretary)

By: _____

Deputy Date

Attachment: Attachment A

ATTACHMENT A

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY")
and AECOM Technical Services, Inc. ("CONSULTANT")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

9. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
10. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
11. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
12. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

8. COMMERCIAL GENERAL LIABILITY:

- (ix) \$1,000,000 per occurrence for bodily injury and property damage;
- (x) \$1,000,000 per occurrence for personal and advertising injury;
- (xi) \$2,000,000 aggregate for products and completed operations; and,
- (xii) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

9. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
10. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
11. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (v) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (vi) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

7. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

8. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
9. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

11. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
12. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
13. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
14. A copy of the claims reporting requirements must be submitted to CITY for review.
15. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY

under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

**Exhibit B-3
Kleinfelder Side Agreement**

AGREEMENT

THIS AGREEMENT (Agreement) made and entered into as of this ____ day of April 2021, entered into between the City of Fresno, a municipal corporation (City), and Kleinfelder (Contractor).

RECITALS

City and AECOM Technical Services., (Consultant) entered into a Consultant Services Agreement, (Agreement) on or about April 9, 2021, which requires Consultant to provide certain insurance and indemnity to the City; and

This Agreement requires the Contractor to provide insurance indemnify, hold harmless, and defend City; and

The City and Contractor desire to enter into this Agreement to comply with any and all insurance requirements as dictated in the Agreement with the Consultant.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. To the furthest extent allowed by law including California Civil Code section 2782, Contractor shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, Contractor or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. Contractor's obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If Contractor should subcontract all or any portion of the work to be performed under this Contract, Contractor shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

Contractor is responsible for any and all insurance and indemnification required by BNSF. If Contractor should subcontract all or any portion of the work

performed under this Contract, Contractor shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

2. Contractor shall comply with the insurance requirements as described in **Attachment A**, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

City:
City of Fresno,
A California municipal corporation

Contractor:
[Contractor name and business entity
type]

By: _____
Thomas Esqueda,
City Manager

By: _____

Name: _____

APPROVED AS TO FORM;
DOUGLAS T. SLOAN
City Attorney

Title: _____
(If corporation or LLC., Board Chair, Pres.
or Vice Pres.)

By: _____
Kristi M. Costa Date
Deputy City Attorney

By: _____

Name: _____

ATTEST:
YVONNE SPENCE, CRM MMC
City Clerk

Title: _____
(If corporation or LLC., CFO, Treasurer,
Secretary or Assistant Secretary)

By: _____

Deputy Date

Attachment: Attachment A

ATTACHMENT A

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY") and AECOM Technical Services, Inc. ("CONSULTANT")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

13. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
14. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
15. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
16. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

12. COMMERCIAL GENERAL LIABILITY:

- (xiii) \$1,000,000 per occurrence for bodily injury and property damage;
- (xiv) \$1,000,000 per occurrence for personal and advertising injury;
- (xv) \$2,000,000 aggregate for products and completed operations; and,
- (xvi) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

13. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
14. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
15. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (vii) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (viii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

10. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

11. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
12. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

16. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
17. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
18. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
19. A copy of the claims reporting requirements must be submitted to CITY for review.
20. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY

under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

**Exhibit B-4
V&G Side Agreement**

AGREEMENT

THIS AGREEMENT (Agreement) made and entered into as of this ____ day of April 2021, entered into between the City of Fresno, a municipal corporation (City), and V&G Builders (Contractor).

RECITALS

City and AECOM Technical Services., (Consultant) entered into a Consultant Services Agreement, (Agreement) on or about April 9, 2021, which requires Consultant to provide certain insurance and indemnity to the City; and

This Agreement requires the Contractor to provide insurance indemnify, hold harmless, and defend City; and

The City and Contractor desire to enter into this Agreement to comply with any and all insurance requirements as dictated in the Agreement with the Consultant.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. To the furthest extent allowed by law including California Civil Code section 2782, Contractor shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, Contractor or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. Contractor's obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If Contractor should subcontract all or any portion of the work to be performed under this Contract, Contractor shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

Contractor is responsible for any and all insurance and indemnification required by BNSF. If Contractor should subcontract all or any portion of the work

performed under this Contract, Contractor shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

2. Contractor shall comply with the insurance requirements as described in **Attachment A**, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

City:
City of Fresno,
A California municipal corporation

Contractor:
[Contractor name and business entity
type]

By: _____
Thomas Esqueda,
City Manager

By: _____

Name: _____

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

Title: _____
(If corporation or LLC., Board Chair, Pres.
or Vice Pres.)

By: _____
Kristi M. Costa Date
Deputy City Attorney

By: _____

Name: _____

ATTEST:
YVONNE SPENCE, CRM MMC
City Clerk

Title: _____
(If corporation or LLC., CFO, Treasurer,
Secretary or Assistant Secretary)

By: _____

Deputy Date

Attachment: Attachment A

ATTACHMENT A

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY") and AECOM Technical Services, Inc. ("CONSULTANT")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

17. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
18. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
19. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
20. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

16. COMMERCIAL GENERAL LIABILITY:

- (xvii) \$1,000,000 per occurrence for bodily injury and property damage;
- (xviii) \$1,000,000 per occurrence for personal and advertising injury;
- (xix) \$2,000,000 aggregate for products and completed operations; and,
- (xx) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

17. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
18. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
19. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (ix) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (x) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

13. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

14. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
15. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

21. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
22. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
23. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
24. A copy of the claims reporting requirements must be submitted to CITY for review.
25. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY

under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

**Exhibit B-5
Design Workshop Side Agreement**

AGREEMENT

THIS AGREEMENT (Agreement) made and entered into as of this ____ day of April 2021, entered into between the City of Fresno, a municipal corporation (City), and Design Workshop (Contractor).

RECITALS

City and AECOM Technical Services., (Consultant) entered into a Consultant Services Agreement, (Agreement) on or about April 9, 2021, which requires Consultant to provide certain insurance and indemnity to the City; and

This Agreement requires the Contractor to provide insurance indemnify, hold harmless, and defend City; and

The City and Contractor desire to enter into this Agreement to comply with any and all insurance requirements as dictated in the Agreement with the Consultant.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. To the furthest extent allowed by law including California Civil Code section 2782, Contractor shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, Contractor or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. Contractor's obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If Contractor should subcontract all or any portion of the work to be performed under this Contract, Contractor shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

Contractor is responsible for any and all insurance and indemnification required by BNSF. If Contractor should subcontract all or any portion of the work

performed under this Contract, Contractor shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

2. Contractor shall comply with the insurance requirements as described in **Attachment A**, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

City:
City of Fresno,
A California municipal corporation

Contractor:
[Contractor name and business entity
type]

By: _____
Thomas Esqueda,
City Manager

By: _____
Name: _____

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

Title: _____
(If corporation or LLC., Board Chair, Pres.
or Vice Pres.)

By: _____
Kristi M. Costa Date
Deputy City Attorney

By: _____
Name: _____

ATTEST:
YVONNE SPENCE, CRM MMC
City Clerk

Title: _____
(If corporation or LLC., CFO, Treasurer,
Secretary or Assistant Secretary)

By: _____
Date
Deputy

Attachment: Attachment A

ATTACHMENT A

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY")
and AECOM Technical Services, Inc. ("CONSULTANT")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

21. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
22. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
23. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
24. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

20. COMMERCIAL GENERAL LIABILITY:

- (xxi) \$1,000,000 per occurrence for bodily injury and property damage;
- (xxii) \$1,000,000 per occurrence for personal and advertising injury;
- (xxiii) \$2,000,000 aggregate for products and completed operations; and,
- (xxiv) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

21. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
22. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
23. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (xi) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (xii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

16. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

17. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
18. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

26. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
27. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
28. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
29. A copy of the claims reporting requirements must be submitted to CITY for review.
30. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY

under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

**Exhibit B-6
VRPA Side Agreement**

AGREEMENT

THIS AGREEMENT (Agreement) made and entered into as of this ____ day of April 2021, entered into between the City of Fresno, a municipal corporation (City), and VRPA (Contractor).

RECITALS

City and AECOM Technical Services., (Consultant) entered into a Consultant Services Agreement, (Agreement) on or about April 9, 2021, which requires Consultant to provide certain insurance and indemnity to the City; and

This Agreement requires the Contractor to provide insurance indemnify, hold harmless, and defend City; and

The City and Contractor desire to enter into this Agreement to comply with any and all insurance requirements as dictated in the Agreement with the Consultant.

AGREEMENT

NOW, THEREFORE, the parties agree as follows:

1. To the furthest extent allowed by law including California Civil Code section 2782, Contractor shall indemnify, hold harmless and defend CITY, Fresno County Transportation Authority (FCTA) and each of their officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage) incurred by CITY or FCTA, Contractor or any other person, and from any and all claims, demands and actions in law or equity (including attorney's fees and litigation expenses), arising or alleged to have arisen directly or indirectly out of performance of this Contract. Contractor's obligations under the preceding sentence shall apply regardless of whether CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers are passively negligent, but shall not apply to any loss, liability, fines, penalties, forfeitures, costs or damages caused by the active or sole negligence, or the willful misconduct, of CITY, Fresno County Transportation Authority or any of their officers, officials, employees, agents and volunteers.

If Contractor should subcontract all or any portion of the work to be performed under this Contract, Contractor shall require each subcontractor to indemnify, hold harmless and defend CITY, Fresno County Transportation Authority and each of their officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

Contractor is responsible for any and all insurance and indemnification required by BNSF. If Contractor should subcontract all or any portion of the work

performed under this Contract, Contractor shall require subcontractor meet any and all insurance and indemnification required by BNSF.

This section shall survive termination or expiration of this Contract.

2. Contractor shall comply with the insurance requirements as described in **Attachment A**, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the parties have executed this Amendment at Fresno, California, the day and year first above written.

City:
City of Fresno,
A California municipal corporation

Contractor:
[Contractor name and business entity
type]

By: _____
Thomas Esqueda,
City Manager

By: _____

Name: _____

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

Title: _____
(If corporation or LLC., Board Chair, Pres.
or Vice Pres.)

By: _____
Kristi M. Costa Date
Deputy City Attorney

By: _____

Name: _____

ATTEST:
YVONNE SPENCE, CRM MMC
City Clerk

Title: _____
(If corporation or LLC., CFO, Treasurer,
Secretary or Assistant Secretary)

By: _____
Date
Deputy

Attachment: Attachment A

ATTACHMENT A

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY")
and AECOM Technical Services, Inc. ("CONSULTANT")

BNSF Blackstone McKinley Grade Separation

PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

25. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
26. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto).
27. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
28. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

24. COMMERCIAL GENERAL LIABILITY:

- (xxv) \$1,000,000 per occurrence for bodily injury and property damage;
- (xxvi) \$1,000,000 per occurrence for personal and advertising injury;
- (xxvii) \$2,000,000 aggregate for products and completed operations; and,
- (xxviii) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.

25. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
26. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
27. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (xiii) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (xiv) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

19. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad

as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

20. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
21. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

31. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
32. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
33. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
34. A copy of the claims reporting requirements must be submitted to CITY for review.
35. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty (30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY

under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

Exhibit C


DISCLOSURE OF CONFLICT OF INTEREST

BNSF Blackstone McKinley Grade Separation
PROJECT TITLE

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Do you represent any firm, organization or person who is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Are you or any of your principals, managers or professionals, owners or investors in a business which does business with the City of Fresno, or in a business which is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Are you or any of your principals, managers or professionals, related by blood or marriage to any City of Fresno employee who has any significant role in the subject matter of this service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Do you or any of your subcontractors have, or expect to have, any interest, direct or indirect, in any other contract in connection with this Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
* If the answer to any question is yes, please explain in full below.			

Explanation: _____

Additional page(s) attached.



 Signature
 4/6/2021

 Date
 Howard E. Michael

 (name)
 AECOM Technical Services, Inc.

 (company)
 2020 L Street, Suite 400

 (address)
 Sacramento, CA 95811

 (city state zip)