City of FRESNO **REPORT TO THE CITY COUNCIL**

AGENDA ITEM NO.	2 C
COUNCIL MEETING	02/06/14
APPROVED BY	
DEPARTMENT DIRECTOR	
CITY MANAGER	

February 6, 2014

FROM: SCOTT L. MOZIER, PE, Director
Public Works Department

BY: SUSAN DERPINGHAUS, Management Analyst III SDD
Public Works Department – Administration

SUBJECT: A Resolution of the Council of the City of Fresno adopting the 30th Amendment to the Annual Appropriation Resolution No. 2013-98 to appropriate $25,000 in Pacific Gas & Electric 811 Dig-In Safety Awareness Campaign funds for the purchase of campaign materials and reimbursement of City administration costs incurred for the campaign in FY 2014

RECOMMENDATION

Staff recommends the Council adopt the 30th Amendment to the Annual Appropriations Resolution (AAR) No. 2013-98 appropriating $25,000 for the purchase of materials and reimbursement of City administration costs incurred for Pacific Gas & Electric's 811 Dig-In Safety Awareness Campaign.

EXECUTIVE SUMMARY

City staff met with the Pacific Gas & Electric (PG&E) representative to discuss becoming a partner with PG&E in their 811 Dig-In Safety Awareness Campaign. The goal of the campaign is to educate the public on the importance of calling the Underground Service Alert (USA) 811 information line before digging and damaging underground utilities. Staff believes that this is an important issue and agreed to accept a charitable contribution of $25,000 from PG&E to purchase materials and be reimbursed for City administration costs incurred as a partner in the program. Staff recommends the Council approve the AAR Amendment in order to received the funds and partner with PG&E.

BACKGROUND

According to PG&E, there are a large number of third parties digging into the ground for various construction projects each year throughout the Central Valley. Some of these parties are private citizens and others are businesses such as private contractors. When underground utilities are damaged as part of the digging, this poses a safety issue to the public and causes disruption around the site that is affected. It also can cost a substantial amount of money to repair as well as the loss of income to any businesses that may be affected.

PG&E is the leader in coordinating an 811 Dig-In Safety Awareness Task Force which consists of public agency representatives from the Central Valley. The Task Force studied the issue and developed recommendations to address it which included the Safety Awareness Campaign.

The purpose of the campaign is to increase the public's safety by increasing awareness regarding the need to call the USA 811 information line before digging. An additional benefit anticipated from the campaign is City utility lines will be damaged less frequently as a result of increased awareness of their existence due to the use of the 811 information line.

The campaign will be announced through a joint news conference with elected officials and agency representatives from throughout the valley and PG&E representatives. During the campaign, materials will be distributed that will inform and educate the public on the necessity and benefits of calling the 811 information line.

Staff agreed to be a partner in this campaign with PG&E. A charitable contribution of $25,000 was received to pay for campaign materials and to compensate the City for administrative costs incurred as part of the campaign. Staff recommends that the City Council adopt the 30th Amendment to the Annual Appropriation Resolution No. 2013-98 appropriating $25,000 for expenditure on activities related to this campaign.

ENVIRONMENTAL FINDINGS

By the definition provided in the California Environmental Quality Act Guidelines Section 15378, the acceptance of this charitable contribution does not qualify as a "project" and is therefore exempt from the California Environmental Quality Act requirements.

FISCAL IMPACT

Funding will come from PG&E's $25,000 charitable contribution. The campaign will be citywide. There will be no new impact to the General Fund. See attached Resolution for project funding.

Attachment: Resolution

RESOLUTION NO. _____

A Resolution of the Council of the City of Fresno adopting the 30th Amendment to the Annual Appropriation Resolution No. 2013-98 to appropriate $25,000 in Pacific Gas & Electric 811 Dig-In Safety Awareness campaign funds for the purchase of campaign materials and reimbursement of City administrative costs incurred for the campaign in FY 2014

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FRESNO:

THAT PART III of the Annual Appropriation Resolution No. 2013-98 be and is hereby amended as follows:

	Increase/(Decrease)
TO: PUBLIC WORKS DEPARTMENT	
PW Special Proj Revolving Fund	$ 25,000

THAT account titles and numbers requiring adjustment by this Resolution are as follows:

PW Special Proj Revolving Fund		
Revenues:		
Account: **39009** Donations	$ 25,000	
Fund: **46501**		
Org Unit: **181510**		
Total Revenues		$ 25,000
Appropriations:		
Account: **51101** Permanent Salaries	$ 4,000	
53303 Public Relations & Information	20,000	
59105 Purchasing - Variable Charge	1,000	
Fund: **46501**		
Org Unit: **181510**		
Total Appropriations		$ 25,000

THAT the purpose is to appropriate $25,000 in Pacific Gas & Electric 811 Dig-In Safety Awareness campaign funds for the purchase of campaign materials and reimbursement of City administrative costs incurred for the campaign in FY 2014.

CLERK'S CERTIFICATION

STATE OF CALIFORNIA}
COUNTY OF FRESNO } ss.
CITY OF FRESNO }

I, YVONNE SPENCE, City Clerk of the City of Fresno, certify that the foregoing Resolution was adopted by the Council of the City of Fresno, California, at a regular meeting thereof, held on the
_____ Day of _____, 2014

AYES: _____
NOES: _____
ABSENT: _____
ABSTAIN: _____

Mayor Approval: _____, 2014
Mayor Approval/No Return: _____, 2014
Mayor Veto: _____, 2014
Council Override Veto: _____, 2014

_____
YVONNE SPENCE, CMC
City Clerk

City of FRESNO **REPORT TO THE CITY COUNCIL**

AGENDA ITEM NO.	2D
COUNCIL MEETING	02/06/14
APPROVED BY	
DEPARTMENT DIRECTOR	
CITY MANAGER	

February 6, 2014

FROM: SCOTT L. MOZIER, PE, Director
Public Works Department

BY: RANDALL MORRISON, PE, MCE, Special Projects Engineer (RWM)
Public Works Department, Traffic and Engineering Services Division

SUBJECT: Approve a professional services agreement with Cornerstone Structural Engineering in the amount of $1,800,000 for on-call design plan check review services for City infrastructure associated with the construction of the California High-Speed Rail

RECOMMENDATION

Approve a professional services agreement with Cornerstone Structural Engineering in the amount of $1,800,000 for on-call design plan check review services for City infrastructure associated with the construction of the California High-Speed Rail.

EXECUTIVE SUMMARY

In preparation for the California High Speed Rail Project, staff has conducted an extensive consultant selection process, in accordance with Administrative Order 6-19, in order to secure a qualified professional engineering team to help support City staff in reviewing design plan check submittals. The California High Speed Rail Authority (CHSRA) has awarded a $985 million design-build contract to the joint venture of Tutor Perini / Zachry / Parsons (TPZP) to construct the first phase of the project, which primarily includes the proposed infrastructure within the City of Fresno. The CHSRA authorized TPZP to start design work in October of 2013 and the first set of plans for impacted City infrastructure is nearly ready for plan check. It is anticipated that due to the size and schedule of this project, City staff would not be able to efficiently review the design plan check packages on top of the already increasing development in the City. The Consultant team will work closely with City staff to help meet the demand of the project. Staff recommends approval of the agreement with Cornerstone Structural Engineering for on-call design plan review services.

BACKGROUND

The CHSRA is proposing to begin construction in Fresno within the next year and on May 3, 2012, certified the Final Environmental Impact Report for the Merced to Fresno segment. The alignment as depicted in the project's Environmental Impact Report is generally on the west side of the Union Pacific Railroad (UPRR) tracks from north of Herndon Avenue through

downtown and south to Jensen Avenue, then curving toward an alignment on the west side of the Burlington Northern Santa Fe (BNSF) tracks from the Highway 99 crossing to the southerly sphere of influence boundary at American Avenue. In order to construct the HSR corridor on the proposed track alignment, numerous City facilities will have to be relocated or modified. These facilities include the protection, modification or relocation of numerous sewer and water pipelines, the relocation of Golden State Boulevard between the Herndon Avenue/SR-99 interchange and Ashlan Avenue, extensive modification of streets such as Parkway Drive west of SR-99 as a result of shifting SR-99 to the west, street closures, grade separations (such as Shaw Avenue, McKinley Avenue, Olive Avenue, Belmont Avenue, Fresno Street underpass extension, Tulare Street, Ventura Street, Church Avenue, and Central Avenue) and associated work such as signing, striping, traffic signal modifications, street lighting, drainage facilities, curbs, gutters and sidewalks.

The CHSRA has awarded a $985 million design-build contract to the joint venture of TPZP to construct the first phase of the project, which primarily includes the proposed infrastructure within the City of Fresno. The CHSRA authorized TPZP to start design work in October of 2013 and the first set of plans for impacted City infrastructure is nearly ready for plan check.

The typical City process for any outside agency or developer to construct City infrastructure or private infrastructure in the City public right-of-way would start with the design plan review by various City departments. The proposed improvements to be constructed for high-speed rail would require the same typical design plan review as any other public improvement project. With the limited staff in Public Works and Public Utilities, staff has determined it is necessary to obtain these on-call services to help augment City staff to meet the demanding schedule of high-speed rail. The scope of services of this agreement fall in line with the City's process and will also be performed in accordance with the City's Master Fee Schedule. Each design plan review package that is delegated to the consultant team will be reviewed on a fee percentage basis within the fees collected by the City. The Consultant team will work closely with City staff to coordinate project specifics and design parameters. It will require a collaborative effort to meet the demand of the project.

Per Administrative Order 6-19, Public Works staff mailed out and posted on the City's website, a notice requesting a statement of qualifications from consultants. Based on the statement of qualifications, staff selected Cornerstone Structural Engineering to provide professional on-call design plan check review services for City infrastructure associated with the construction of the California High Speed Rail. Cornerstone is based in Fresno and is supported by local subconsultants.

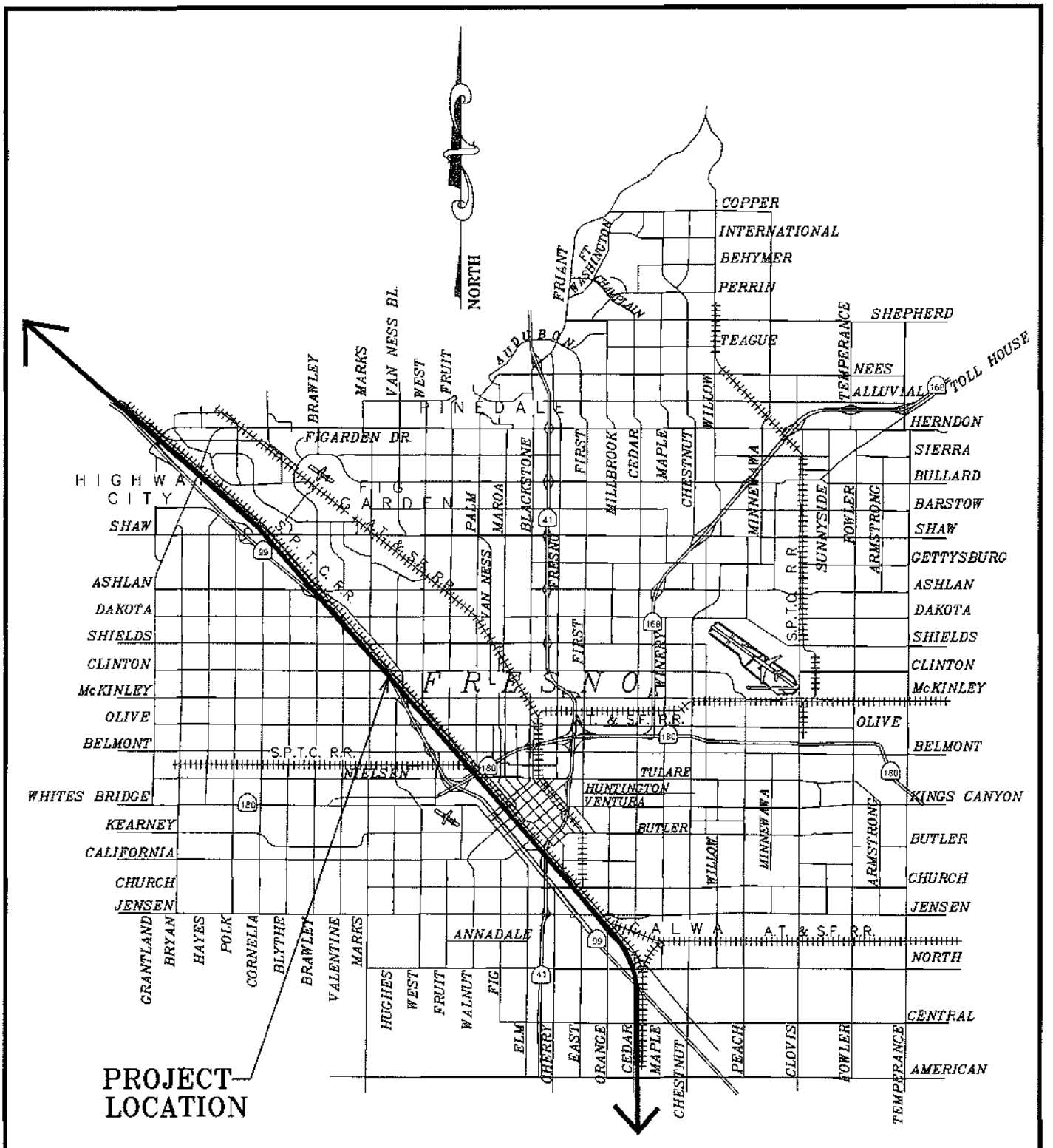
Therefore, staff is requesting the approval of the Consultant Agreement, in the amount of $1,800,000 with Cornerstone Structural Engineering to perform on-call design plan review services and to authorize the Public Works Director or his designee to execute the agreement on behalf of the City. The Agreement for Consultant Services has been approved to form by the City Attorney's Office. The costs of this agreement will be paid for with fees collected from the design-build contractor in accordance with the City of Fresno Master Fee Schedule.

FISCAL IMPACT

All costs related to the on-call design plan review services will be funded by fees collected through the plan check process specified in the master fee schedule. The fees collected for plan check services are based on a percentage of the engineer's estimate of probable construction costs for each individual plan check package. There will be no fiscal impact to the General Fund associated with the recommended plan review services agreement for the CHSRA project located in Council Districts 1, 2 and 3.

File: 2014-02-06 HSR Plan Review Consultant Contract

Attachments:
-Project Vicinity Map
-Fiscal Impact Statement
-Agreement with Cornerstone Structural Engineering



CITY OF FRESNO – DEPARTMENT OF PUBLIC WORKS

ON-CALL PLAN REVIEW CONSULTANT SERVICES FOR CITY INFRASTRUCTURE AFFECTED BY HSR

PROJECT VICINITY MAP

NOT TO SCALE

COUNCIL DISTRICTS 1, 2 & 3

DATE: FEBRUARY 6, 2014

FISCAL IMPACT STATEMENT

PROGRAM: PW00696, HSR DEVELOPMENT SERVICES

RECOMMENDATION	TOTAL OR CURRENT	ANNUALIZED COST
Direct Cost	$1,800,000	
Indirect Cost	$1,100,000*	
TOTAL COST	$2,900,000**	
Additional Revenue Generated from Plan Check Fees	$2,900,000	
Net City Cost	0	
Amount Budgeted (If none budgeted, identify source)	0	

*Indirect costs consist of the assumed staff time for internal plan review and coordination of the City infrastructure associated with high-speed rail.

**The total amount shown is estimated based on the preliminary estimated cost for construction of City infrastructure associated with the construction of the high-speed rail. The estimated amount is calculated at 1.8% of the estimated construction costs.

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AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES

THIS AGREEMENT is made and entered into effective the ____ day of February, 2014, by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and Cornerstone Structural Engineering Group, Inc., a California Corporation (hereinafter referred to as "CONSULTANT").

RECITALS

WHEREAS, CITY desires to obtain professional on-call design plan check review services for CITY infrastructure associated with the construction of the California High-Speed Rail, hereinafter referred to as the "Project;" and

WHEREAS, CONSULTANT is engaged in the business of furnishing services as a Professional Engineer 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 Director (hereinafter referred to as "Administrator") or his/her designee.

AGREEMENT

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

1. Scope of Services. CONSULTANT shall perform to the satisfaction of CITY the services described in **Exhibit A**, including all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**.

2. Term of Agreement and Time for Performance. This Agreement shall be effective from the date first set forth above ("Effective Date") and shall continue in full force and effect through December 31, 2017, subject to any earlier termination in accordance with this Agreement. The services of CONSULTANT as described in **Exhibit A** are to commence upon the Effective Date and shall be completed in a sequence assuring expeditious completion, but in any event, all such services shall be completed prior to expiration of this Agreement and in accordance with any performance schedule set forth in **Exhibit A**.

3. Compensation.

(a) CONSULTANT'S total compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall not exceed $1,800,000. Compensation shall be paid on a fixed fee basis, calculated as a percentage of the Engineer's Estimate of Probable Construction Cost of each Public Improvement Plan Check Package submitted to the CITY and reviewed by the CONSULTANT in accordance with the compensation schedule contained in Exhibit A. Each Plan Check Package fixed fee shall be based on an Engineer's Estimate of Probable Construction Cost broken down by item and supported by quantity calculations, signed and stamped by a licensed Civil Engineer in the State of California, multiplied by the applicable percentages described in Exhibit A.

(b) Detailed statements shall be rendered monthly for services performed in the preceding month and will be payable in the normal course of CITY business.

(c) 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 and Force Majeure.

(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 Administrator's request, 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 Administrator 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 Administrator of the cessation of such occurrence.

5. Confidential Information and Ownership of Documents.

(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 the Administrator. 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, 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 writings and 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. CONSULTANT shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein.

(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, CONSULTANT shall indemnify, hold harmless and defend CITY and each of its 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), and from any and all claims, demands and actions in law or equity (including reasonable attorney's fees and litigation expenses) that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of CONSULTANT, its principals, officers, employees, agents or volunteers in the performance of this Agreement.

If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

This section shall survive termination or expiration of this Agreement.

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** 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) from 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.) and the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations Section 18700 et. seq.). 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 unless fully disclosed to and approved by the City Manager, in advance and in writing. 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. Notwithstanding any approval given by the City Manager under this provision, CONSULTANT shall remain responsible for complying with Section 9(b), above.

(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 Administrator 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.

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.

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: _____
Scott Mozier, PE, TE,
Public Works Director
Public Works Department

ATTEST:
YVONNE SPENCE, CMC
City Clerk

By: _____
Deputy

No signature of City Attorney required. Standard Document #ALL 3.0 has been used without modification, as certified by the undersigned.

By: _____
Randall Morrison, PE, MCE
Special Projects Engineer
Public Works Department

Cornerstone Structural Engineering Group, inc.,
a California Corporation

By: _____

Name: Todd M. Goolkasian

Title: President
(if corporation or LLC, Board Chair, Pres. or Vice Pres.)

By: _____

Name: Maureen Goolkasian

Title: CFO
(if corporation or LLC, CFO, Treasurer, Secretary or Assistant Secretary)

Any Applicable Professional License:
Number: S 3543
Name: Todd M. Goolkasian
Date of Issuance: 3/5/13

Addresses:

CITY:
City of Fresno
Attention: Randall Morrison, PE, MCE,
Special Projects Engineer
2600 Fresno Street
Fresno, CA 93721
Phone: (559) 621-8703
FAX: (559) 488-1045

CONSULTANT:
Cornerstone Structural Engineering Group
Attention: Todd M. Goolkasian, SE,
President
986 W. Alluvial Avenue, Suite 201
Fresno, CA 93711
Phone: (559) 320-3200
FAX: (559) 320-3201

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

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CORNERSTONE structural engineering group

Exhibit A

SCOPE OF SERVICES

Consultant Service Agreement between City of Fresno ("CITY") and Cornerstone Structural Engineering Group, Inc. ("CONSULTANT")

CITY Infrastructure Associated with the Construction of the California High-Speed Rail

PROJECT TITLE

CONSULTANT will provide design plan check review services for the proposed City of Fresno (CITY) infrastructure associated with the construction of the California High-Speed Rail (HSR) Construction Package 1 (CP1) design-build project. The City will complete the review of the Design and Code Analysis Report (Project Design Criteria and 30% design). The CONSULTANT design plan check review services will include the review of the 60% (CONSULTANT First Round) and 90% (CONSULTANT Second Round) submittal packages of the construction documents, including plans, specifications, calculations, and reports, for roadway, drainage, traffic (including signals), grading, structures, and CITY owned wet and electrical utilities. The CONSULTANT services may also include the design plan check review of the 100% submittal packages, if authorized by the CITY as additional services. The anticipated City of Fresno infrastructure impacted by the HSR CP1 Project includes, but is not limited to, the Roadway and Grade Separation Inventory shown on the attached **Appendix 1.**

CONSULTANT will provide design plan check review services of the HSR CP1 infrastructure design to check general conformance with the applicable codes, regulations, standards, and guidelines described in this section.

Codes, Regulations, Standards, and Guidelines

Design criteria, guidelines, and requirements for the design of infrastructure within the HSR CP1 package is defined in Book 3, Part C, Subpart 1 of the Agreement between the California High Speed Rail Authority (CHSRA) and Tutor Perini/Zachry/Parsons (Contractor). The design criteria defined in the CHSRA Agreement includes general federal, state, and industry-specific regulations, codes, standards, and guidelines that the Contractor will be required to conform to in the final design of the HSR CP1 infrastructure.

In addition to the established CHSRA design criteria described above, the Contractor will also be required to conform to CITY regulations, standards, codes, and guidelines. For the portion of the HSR CP1 infrastructure within the purview of the City of Fresno, this additional criteria includes the following:

- City of Fresno General Plan
- City of Fresno Standard Drawings and Specifications
- City of Fresno Bicycle, Pedestrian, and Trails Master Plan
- City of Fresno Department of Utilities Water Master Plan
- City of Fresno Department of Utilities Sewer Master Plan
- City of Fresno Design Guidelines dated December 6, 2013
- Fresno Metropolitan Flood Control District Standards and Master Plan
- Fresno Irrigation District Standards

PLAN CHECK REVIEW SCOPE OF SERVICES

The CITY will review the Design and Code Analysis Report (Project Design Criteria and 30% Design), CONSTULANT will review the 60% (CONSULTANT First Round) and 90% (CONSULTANT Second Round) submittal packages. Review of 100% submittal packages will be by CITY, unless authorized by the CITY as extra services. Design Reports, plans, specifications, and calculations will be reviewed to verify general conformance with the applicable project design criteria as described in this scope of services. Submittal packages and sheet counts of each submittal package will be tracked by CONSULTANT using a spreadsheet as shown in **Appendix 2**. Using a Plan Review Checklist (**Appendix 3**), CONSULTANT will review each construction document package to ensure proper format and pertinent information is included in the design.

Plan check reviews will identify elements of the construction document packages that do not comply with the design criteria. All comments will be provided in the form of redline plans and a Comment/Response matrix (**Appendix 4**). A Comment/Response matrix will be prepared for each project construction document package. The matrix allows the reviewer to track disposition of comments through approval. Plan approval will occur when all comments on the matrix have been addressed.

Structural review of Viaduct and Underpass structures (structures which carry the HSR train) will be limited to general conformance with structural standards and City of Fresno Design Guidelines. Reviews of these structures related to their ability to carry HSR rail loading, maintain required HSR vertical and horizontal tolerances, stray current provisions, etc. will not be included in this scope of services since these items are related to the High Speed Rail operations and do not impact CITY operations.

In accordance with established CITY practices, traffic handling and traffic control plans will not be included in the plan check review.

CONSULTANT staff of engineers and plan reviewers will be available for meetings with Contractor upon reasonable notice.

As requested by the CITY, up to five (5) CONSULTANT staff will report to the City Hall offices for the first three months of services to establish a working protocol for plan check review responsibilities between CONSULTANT and CITY staff. The CITY will provide the needed office space and workstation desk for each CONSULTANT staff. The CITY shall also provide parking passes and ID Badges to CONSULTANT staff.

The following are the objectives, focus, and activities of the plan check review for the respective submittal levels:

Design and Code Analysis Report (Project Design Criteria) – by CITY

Per the HSR CP1 Contract, the Contractor is required to submit to the Authority a Design and Code Analysis Report. In this report, the Contractor shall review and identify current design, industry, third party (including the City of Fresno), and regulatory design and construction codes and requirements that may impact the design and construction of the HSR CP1 project. This submittal will also include 30% level designs that address utility types and alignments, and roadway geometric alignments and cross sections.

The Design and Code Analysis Report approval will be done by the CITY. The CONSULTANT shall review the approved Design and Code Analysis Report and use as a reference during the plan check process.

60% Review (CONSULTANT First Round Plan Check)

- Research existing as-built drawings, utility plat maps, and any other available documentation
- Review the City-approved Design and Code Analysis Report and 30% level designs and use as a reference during the plan check process
- Review existing conditions to determine full impacts
- Review plans based on the established criteria for design of City of Fresno facilities
- Identify and define additional project improvements such as wet utilities, drainage, and electrical facilities
- Check that designs are calculated correctly and accurately
- Check that impacts (R/W, utilities, etc.) are accurately and consistently identified
- The signal street lighting plans will be reviewed for layout and the proposed locations of the traffic signal and street lighting equipment, including locations of controllers, signal and street lighting poles, type of pedestrian signals, traffic signal interconnect, emergency vehicle pre-emption, existing to remain and proposed new points of service etc.
- Check interface with all facilities (roadway, structures, wet utilities, and electrical) for consistency
- Perform review of construction document package for quality. Review will focus on consistency, completeness, and constructability of design. Alignment and grade information and quantity estimates will be checked for mathematical accuracy as well as reasonableness.
- Review all structural calculations
- Review geotechnical reports for all structures
- For signals and streetlights, items to be reviewed at this design level are:
    - Conduit and conductor schedule

- Points of service locations
- Voltage drop calculations
- Loop detector type and locations
- Loop detector designations
- Visibility to signal heads

- Compare proposed aesthetic and structural treatments to City of Fresno Design Guidelines and note inconsistencies.
- Prepare checklist and comment matrix

90% Review (CONSULTANT Second Round Plan Check)

- Review comments and Designer Responses from 60% submittal and resolve any outstanding comments prior to commencing review of 90% submittal.
- Check interface with all facilities (roadway, structures, wet utilities, and electrical) for consistency.
- Review will focus on consistency, completeness, and constructability of design. Alignment and grade information and quantity estimates will be checked for mathematical accuracy as well as reasonableness.
- Review roadway and structure special provisions
- Review quantity calculations and cost estimates for reasonableness.
- For signals and streetlights, at this stage other items (not previously reviewed) to be reviewed at this design level are:
  - Completed PG&E Rule 16 and design for points of service
- Compare proposed aesthetic and structural treatments to City of Fresno Design Guidelines and note inconsistencies.
- Prepare checklist and updated comment matrix

100% Review (By CITY, unless otherwise agreed)

- Review comments and Designer Responses from 90% submittal and resolve any outstanding comments prior to commencing review of 100% submittal
- Thorough review of Final PS&E package for approval and construction
- Check to ensure all comments have been addressed
- Verify that utility companies and other agencies' concerns are addressed to ensure that Final PS&E is satisfactory to other impacted parties

AUTHORIZATION OF PUBLIC IMPROVEMENT PLAN CHECK PACKAGES

CONSULTANT will be given written authorization by the CITY to proceed to complete plan check reviews on individual Public Improvement Plan Check Packages as received by the CITY from the Contractor, CHSRA, Harris-Wong, or related entities as applicable, for all CITY-owned roadways, traffic signals, utilities and appurtenant facilities affected by the California High Speed Rail.

CONSULTANT shall be compensated monthly on a percentage complete basis for each Public Improvement Plan Check Package authorized by the CITY for review. The CONSULTANT's regular compensation for each individual Public Improvement Plan Check Package shall equal 1.0% (one percent) of the approved Engineer's Estimate of Probable Construction Cost for each authorized plan check package, comprised of CONSULTANTS first and second round plan check. A Third Round Plan Check by CONSULTANT is optional at the discretion of the CITY and will require a separate written Authorization to Proceed by CITY. Should the CONSULTANT be requested to complete a Third Round Plan Check, CONSULTANT'S compensation shall be increased by an additional 0.1% (one tenth of a percent) of the approved Engineer's Estimate of Probable Construction Cost for each authorized plan check package.

CONSULTANT's compensation will be as summarized below:

CONSULTANT Compensation Schedule	
Submittal	CONSULTANT Compensation
Design and Code Analysis Report	0.0% (By CITY)
60% Review (CONSULTANT First Round Plan Check):	0.5%
90% Review (CONSULTANT Second Round Plan Check) :	0.5%
100% Review	0.1% (If Authorized by CITY)

Should the contractor's Engineer's Estimate of Probable Construction Cost, in the opinion of the CONSULTANT, be determined to be significantly (±5%) higher or lower than the construction cost determined by CONSULTANT based on recent similar project bids, Caltrans published unit prices, and/or other generally accepted construction cost criteria, CITY shall provide written notification to CONSULTANT and the CONSULTANT'S plan check fee will be adjusted accordingly.

COMMUNICATIONS PROTOCOL

All communications related to plan check services covered hereunder will flow between CITY and CONSULTANT only. CITY will provide CONSULTANT with 6 sets of full-size hardcopies, or a combination of electric copies and 2 full-size hardcopies, of all submittal documents, including plans, specifications, calculations, reports, etc. CONSULTANT will review and provide red-marked comments as appropriate on all submitted documents. CONSULTANT will also provide a completed comment/response matrix (see Appendix 4). CONSULTANT comments will be timely provided to CITY both in hardcopy (1 set) and electronic scanned PDF files. CITY will forward comments to the appropriate HSR entity. All meetings and teleconferences, if required, will be coordinated by the CITY. CONSULTANT will give reasonable notice to CITY if it desires a meeting or teleconference.

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Appendix 1

ANTICIPATED CITY OF FRESNO INFRASTRUCTURE IMPACTED BY HSR CP1

Based on the HSR Construction Package 1 (CP1), City-owned corridors anticipated to be affected by CP1 are listed below. The total length of City-owned corridors that will be affected is anticipated to be approximately 20.5 miles (108,250 LF). Wet Utilities (water, sewer, and drainage) within the limits of these corridors are assumed to be impacted by the project and are included in the plan check review.

While the specific locations to be reviewed for the modification of existing traffic signals and new traffic signals has not been finalized, there is a general idea as to which intersections will likely require new signals or the modification of existing traffic signals. Similarly while the exact amount of roadway lighting to be reviewed is not known, there is a general idea as to the streets that will be affected to require new street lighting as part of the High Speed Rail project. It is assumed that street lighting will be provided for all affected roadways listed below. Based upon the following amount of roadway, lighting is estimated to be approximately 20.5 miles in length. The following table may be modified by CITY at any time during the term. Any additions will be governed by the Agreement and this Exhibit A.

ROADWAY INVENTORY

Segment		Roadway	HST	Length
NORTH	Golden State Boulevard (Herndon SB Off Ramp to Ashlan)	Herndon On-Ramp & Off Ramp to/from Golden State		
		Herndon NB On-Ramp "H1" (from Golden State Blvd)		2427
		Herndon SB Off Ramp "H2" (to Golden State Blvd)		452
		Golden State Boulevard (Herndon SB Off Ramp to Ashlan)		23886
		Kathryn Way "K"	1743+00	252
		Barstow Ave "B"	S10587+25	277
		Market Ave "M"	S10598+65	400
		State Ave "ST"	S10606+90	200
		Cornelia Ave / Santa Ana Ave "CS"	S10620+00	3622
		Bullard Ave "BU"		2253
CENTRAL	Shaw Avenue	Shaw Avenue Overhead "SH"	S10628+29	2212
		Weber Ave "W"	S10627+70	410
		W Jennifer Ave "J"		350
		Cornelia Ave "CS"		3622
	Ashlan Avenue	Ashlan Ave "AS"	10700+63	2305
		Ashlan Cross Street "AS5"		266
		Cul-De-Sac (N Parkway Dr) "NP"		156
		N Parkway Dr "V1"		450
		Valentine Ave "VAL"		1395
		Cul-De-Sac "SC"		166
		Shields Ave "S"		482
		Princeton Ave "WP"		109
		Weber Ave "NW"		327
		Vassar Ave "VA"		617

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ROADWAY INVENTORY

Segment		Roadway	HST	Length
	Clinton Avenue	Clinton Ave "C"	10805+95	2590
		Pleasant Ave "P"		583
		Woodson Ave "W"		812
		McKinley SB On-Ramps "MK3"	10841+01	653
	McKinley Ave	McKinley Avenue Overhead	S10841+00	1865
		McKinley Ave Connector "MCC"		744
		Weber Ave "WEB"		575
	Golden State Boulevard	Golden State Boulevard (McKinley to Olive)		4116
		N West Ave "WES"		513
	Olive Avenue	W Olive Avenue Overhead "OU"	S10876+00	2214
		N Carruth Avenue		269
		N Delno Ave Cul-De-Sac		160
	Belmont Avenue	Belmont Avenue Overhead "BE1"	S10910+00	2440
		N Wesley Ave "WSL"		469
		N Weber Ave / H St "HS"		1760
		N Harrison Ave Cul-De-Sac		160
		N Farris Ave Connection		260
		N Thorne Ave (Near Divisadero St) "THO"		143
	Stanislaus/ Tuolumne	Stanislaus Street Overhead "STN"	S10977+00	1790
		Tuolumne Street Overhead "TUO"	S10982+00	1740
	Tulare Street	Tulare Street Overhead "TU1"	S11001+00	2341
	Ventura Street	Ventura Street Overhead "VEN"	S11020+00	850
		F Street "FS"		300
		Broadway Street BRO"		900
SOUTH	Church Avenue	E Church Avenue Overhead "FCH"	S373+66	2507
		Golden State Blvd "SGS"		800
		Old E Church Ave "FOC"		1263
		G St "FGC"		500
	Central Ave	E Central Ave Overhead "FC1"	S23+98	2600
		S Cedar Ave "FCD"		1088

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GRADE SEPARATION INVENTORY		
	Structure	**Structure Type**
NORTH	Viaduct 203	Viaduct Network Tied Arch/Truss
	San Joaquin River	
	Union Pacific Railroad	
	Golden State Boulevard	
	Herndon Avenue	
CENTRAL	Shaw Avenue	Overhead
	McKinley Avenue	Overhead
	Olive Avenue	Overhead
	Belmont Avenue	Overhead
	Fresno Grade Separation	Jacked Box Tunnel
	Union Pacific Railroad	
	State Route 180	
	Stanislaus Street	Overhead
	Tuolumne Street	Overhead
	Fresno Street	Underpass
	Tulare Street	Underpass
	Ventura Street	Underpass
SOUTH	Church Street	Overhead
	Jensen Avenue	Overhead
	Fresno Viaduct	Viaduct Network Tied Arch/Truss
	Golden State Boulevard	
	BNSF RR	
	North Avenue	
	Cedar Avenue	
	State Route 99	
	Central Avenue	Overhead

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Appendix 2

ANTICIPATED SHEET COUNT FOR PLAN REVIEW SERVICES

CIVIL SHEETS

Segment	Typical Cross Section	Layouts (1"=40'-0")	Profiles and Superelevation Diagrams (1"=40')	Construction Details (varies)	Grading Plan (1"=20')	Drainage Plans, Profiles, and Details	Water Line Plan, Profiles, and Details	Sewer Line Plan, Profiles, and Details	Pavement Delineation Plan	Pavement Delineation Details	Sign Plans	Sign Plan Details	Signal Plans and Details	Streetlight Plans	Subtotal Sheets
Golden State Boulevard (Herndon SB Off Ramp to Ashlan)	21	42	42	21	21	105	21	21	42	1	42	1	12	42	**434**
Shaw Avenue	5	9	9	5	5	23	5	5	9	1	9	1	8	9	**103**
Ashlan Avenue	7	13	13	7	7	33	7	7	13	1	13	1	8	13	**143**
Clinton Avenue	3	6	6	3	3	15	3	3	6	1	6	1	4	6	**66**
McKinley Avenue	2	4	4	2	2	10	2	2	4	1	4	1	16	4	**58**
Golden State Boulevard (McKinley to Olive)	3	6	6	3	3	15	3	3	6	1	6	1	0	6	**62**
Olive Avenue	3	5	5	3	3	13	3	3	5	1	5	1	8	5	**63**
Belmont Avenue	5	9	9	5	5	23	5	5	9	1	9	1	0	9	**95**
Stanislaus/Toulumne	2	4	4	2	2	10	2	2	4	1	4	1	36	4	**78**
Tulare Street	2	3	3	2	2	8	2	2	3	1	3	1	12	3	**47**
Ventura Street	2	3	3	2	2	8	2	2	3	1	3	1	16	3	**51**
Church Avenue	4	7	7	4	4	18	4	4	7	1	7	1	8	7	**83**
Central Avenue	3	5	5	3	3	13	3	3	5	1	5	1	0	5	**55**
														Total Sheets	**1334**

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STRUCTURE SHEETS

Structure	Structure Type	General Plans/Foundation Plans	Abutment Plans/Details	Bent/Pier Layout	Bent/Pier Details	Typical Sections	Girder Layout	Girder Details	Joint Seal and Bearing Details	Railing Details	Miscellaneous Details	Retaining Wall Layout/Details	Log of Test Borings	Total Sheets
Viaduct 203	Viaduct	14	12	30	10	5	20	90	10	10	60	30	10	**301**
Shaw Avenue	Overhead	3	3	3	4	1	3	2	1	1	4	0	2	**27**
McKinley Avenue	Overhead	3	3	3	4	1	3	2	1	1	4	0	2	**27**
Olive Avenue	Overhead	3	3	3	4	1	3	2	1	1	4	0	2	**27**
Belmont Avenue	Overhead	3	3	3	4	1	3	2	1	1	4	0	2	**27**
Fresno Grade Separation	Jacked Tunnel	10	0	0	0	5	0	0	0	5	40	40	8	**108**
Stanislaus Street	Overhead	3	3	3	4	1	3	2	1	1	4	2	2	**29**
Tuolumne Street	Overhead	3	3	3	4	1	3	2	1	1	4	2	2	**29**
Fresno Street	Underpass	3	3	3	4	1	2	2	2	1	2	2	2	**27**
Tulare Street	Underpass	3	4	0	0	1	2	2	2	1	2	4	2	**23**
Ventura Street	Underpass	3	4	0	0	1	2	2	2	1	2	4	2	**23**
Church Street	Overhead	3	3	3	4	1	3	2	1	1	4	2	2	**29**
Jensen Avenue	Overhead	3	3	3	4	1	3	2	1	1	4	2	2	**29**
Fresno Viaduct	Viaduct	18	12	40	10	5	30	90	10	10	60	30	12	**327**
Central Avenue	Overhead	3	3	3	4	1	3	2	1	1	4	2	2	**29**
													Total Sheets	**1062**

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Appendix 3

CHECK LIST FOR IMPROVEMENT PLANS

Planning Division Name: _____ Planning No: _____
Subdivision Name: _____ Tract No: _____
Public Works Project Number: _____ Assessor's Parcel No: _____
Tentative Map Approval Date: _____

Engineering Firm: _____ Job Number: _____
Project Engineer: _____ Telephone Number: _____
(Appropriate sections to be checked off by the Engineering firm and provided along with 1st submittal)

( ) 1st Check ( ) 2nd Check ( ) 3rd Check — **Checked By/Date/Comments**

7 Sets of Improvement Plans with Landscape Irrigation Plan _____
Sets of Hydrology Map and Calculations _____
Retention Pond Design Criteria on Plans _____
Copy of Engineer's Estimate _____
Copy of Soils Report and Pavement Design Calculations (Arterials) _____
Set of Sewer Map and Calculations _____
Copy of Final Conditions of Approval (Resolutions) _____
Copies of Fireflow Calculations (commercial) _____

REVIEWED BY:

1. Utilities Systems Manager _____
2. Engineering Division Inspection Section _____
3. Central Fire District _____
4. Sent to P.G.& E., Telephone & Cable T.V. _____
5. Other Agency Review
   a. _____
   b. _____

GENERAL (Applicable to every sheet)

1. Sheet size is 24"x36" with 2" space on left side of border and 1" space on right side _____
2. Title Block/Border of each sheet (contains as a minimum):
   a. City_____ of Public Works Department logo _____
   b. City Engineer's signature block _____
   c. Design Engineer's signature block _____
   d. Design Engineer's seal, R.C.E. number and original signature (stamped signatures are not acceptable on final submittal) _____

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		Checked By/Date/Comments
	e. Horizontal scale (l "=40' max) & Vertical scale (1 "=4' max)	
	f. Name of Subdivision or Project and Sheet Name	
3.	Stationing referenced to nearest intersection	
4.	All offset distances measured from center line	
5.	City Standard Details referenced correctly & unchanged (with border)	
6.	Details other than standard, properly detailed	

TITLE SHEET

l.	Required City General Notes on left side (compare to App. A)	
2.	Project Area Diagram:	
	a. Project limits shown as well as any City-County boundaries	
	b. Phase boundaries (if applicable)	
	c. Lots and lot numbers	
	d. New/existing abutting right of ways, easements & street names	
	e. New electroliers	
	f. TBM shown with reference to an approved City benchmark	
	g. Plan Sheet references	
3.	Sheet Index	
4.	Symbol/Abbreviations Legend	
5.	Location Map with North Arrow	
6.	Construction quantities/Scope of Work shown and itemized	

STREETS

A. PLAN VIEWS

1.	Promised items in Project Narrative Questionnaire are shown on plans	
2.	Handicap ramps are designed per Standard Details	
3.	Property corner cutoffs used where handicap ramps installed (see Standard Detail A-l) otherwise concentric with curb	
4.	Curb curve data given-central angle, length, and radius	
5.	Phase boundary shown (if applicable)	
6.	R/W and street width dimensions shown	
7.	Centerline stationing at 100' and at BC & EC of horizontal curves	
8.	Lot/parcel lines and numbers/letters shown	
9.	Cul-de-sac cross slopes from high point to gutter lip-.02 min./.05 max	
10.	Rim and invert elevation and station given at all drainage structures	
11.	TC elevation and station at property line extensions	
12.	TC elevation and station at grade breaks and at curb returns	
13.	0.0025 minimum slope observed on all streets at curb line with minimum 0.2 foot fall around returns	
14.	Location of underground pipes and utilities shown	
15.	Fire hydrant and electrolier meanders per Standard Detail W-9 & E-2	
16.	Street monuments shown	

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17.	Street names shown	
18.	All notes and standard symbols conform to legend	
19.	All ex. utility poles, manholes, valves, signs, mail, boxes, trees, etc. shown Indicates those to be removed, relocated or adjusted to grade	
20.	Continuations and cross streets properly referenced i.e. (See sheet #_)	
21.	Street knuckles are per Standard Detail A-22 or approved deviation	
22.	Street signs, traffic signs and barricades shown in proper locations	
23.	Driveway locations & stationioning shown. Width 16'-24' (residential)	
24.	Shows existing manholes, water valves and other facilities to be adjusted to grade	
25.	North arrow shown for each plan view area	

B. PROFILES

1.	Vert curves designed for proper speeds per Highway Design Manual	
2.	Minimum vertical curve lengths observed. (100')	
3.	Vertical scale 1" = 2' or 1" = 4'	
4.	Vertical curves used for grade-breaks where algebraic difference> 1 %	
5.	Cul-de-sacs, show profiles @ centerline through radius point to TC at end of cul-de-sac (dashed line)	
6.	2% maximum grade observed across intersections	
7.	All underground pipes and utilities shown to include storm drain, water and sewer	
8.	Existing ground on centerline shown	
11.	Finished grade profile for top of curb shown	
12.	Centerline profiles of intersecting streets shown to their point of Intersection	
13.	New road profile conforms to off-site existing road profile.	
14.	Centerline stations and elevations shown @ all BVC, EVC, FIVC, grade breaks, low points and high points	
15.	All slopes in profile shown	
16.	Shows all utility crossings with clearances indicated	
17.	Manhole and drop inlet invert and flowline elevations shown	
18.	Elevation at high and low points of water mains shown	

GRADING PLANS

1.	Erosion control plan included when project is planned for construction between October 15th and May 1st.	
2.	Existing elevations or contours shown	
3.	Existing and proposed storm drain lines and structures shown	
4.	Proposed pad grades & lot numbers shown. Minimum grade of lots 1 %	
5.	"Lowest Floor" shall be minimum 1' above calculated high water point or FIRM base flood elevation, whichever is greater. See Section 4.500 of the Design Standards for further details	

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6.	Retaining walls and sound walls shown	
7.	Section of typical lot shows property lines and slopes/grades	
8.	Elevations at rear of lots shown	
9.	Elevation of surrounding lots shown	
10.	Shows grading required for off-site drainage	
11.	Profile shows back-of-curb/sidewalk and original ground	
12.	Grading conforms to adjacent properties and does not create possible adverse effects on future development	
13.	Drainage does not occur across lot lines. Lots shall drain to streets where practicable	
14.	All slopes are maximum 2: I or per Soils Report	

SANITARY SEWERS

1.	System in agreement with approved tentative map and master plan	
2.	Design conforms to City Design Standards and Details	
4.	Adequate cover. 3' min to finished grade -2' min for ductile iron	
5.	Minimum horizontal and vertical clearances from water main	
6.	Pipe size, type, slope, and length between structures shown	
7.	Connection to existing facilities shown. Manhole installed when tying to existing lines	
8.	Where sewer line extension is possible, do proposed lines extend to at least the subdivision boundary?	
9.	Are curved sewer deflections less than 80% of pipe manufacturer's recommended maximum? Shows curve data or offsets if concentric with centerline. Short pipe lengths are indicated clearly on plans	
10.	Station and invert & top of manhole elevations shown	
11.	Sizes of existing lines shown	
	13.400' maximum distance from manhole to manhole and 250' from manhole to clean out (at end of line)	
12.	Minimum 2 fils velocity, 10 fils maximum	
13.	0.1' drop around comer through manhole, or matches soffit elevation	
14.	Bolted manhole covers for any off street manholes	
15.	In unimproved areas, manholes extended I' above ground	
16.	Elevations, slopes and distances all mathematically correct	
17.	Minimum vertical and horizontal distances to water lines maintained	

DRAINAGE

A. HYDROLOGY-HYDRAULICS

1.	Calculations conform to City Design Standards. Underground system designed to handle a 10-year storm, streets designed to carry a 100 year storm	

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2.	Tributary drainage system designed to connect to City's future storm drainage system and conforms to Storm Drainage Master Plan	
3.	Calculations shall include: HGL, FL El, Q, A, S, V, freeboard at structures, structure losses, & tail water assumptions	
4.	Adequacy of in-tract and off-tract drainage system verified	
5.	All starting water surface calculations adequately verified	
6.	Drainage map showing street system, existing and proposed drainage system, slope arrows, tributary sub-areas in acres, peak flow in all pipes (I" = 1 00' preferred)	
7.	All pipe in tributary areas labeled to correspond with calculations	
8.	Base Flood Elevation verified for the project area	

B. EASEMENTS

1.	Off-tract drainage improvements (plan and profile) and accompanying easements shown. Off-tract offers of dedication for drainage easement submitted for review	
2.	Off-tract work to be done but no easement required; right-of-entry submitted for review	
3.	Easement widths indicated.	

C. STRUCTURES

1.	1.00' minimum HGL to TC	
2.	Special structure calculations provided	

D. PIPE

1.	Minimum slope of 0.002 observed (min. 2 fps). Size (15" min.), class, slope, length, and, type of pipe (RCP) shown in profiles	
2.	Indicates clearly on plans where non-standard pipes are used	
3.	Are curved storm line deflections less than SO% of pipe manufacturer's recommended maximum? Shows curve data or offsets if concentric with centerline	
4.	Elevations, slopes and distances a1l mathematica1ly correct	
5.	Matches hydraulic/hydrology calculations	
6.	Manhole inverts and rim elevations shown along with catch basin invert elevations	

E. CHANNELS

I.	Maximum velocity in earth channel verified by soils report	
2.	Channel side slopes as specified by soils report	
3.	Channel design per City Specific Plan (if applicable)	

F. TEMPORARY STORM DRAIN RETENTION BASINS

Checked By/Date/Comments

1. Runoff and volume calculations per City Design Guidelines _____
2. High water level shown on basin section _____
3. Basin bottom 5' above water table unless statement from soils engineer indicates range of depths, then 2' minimum allowed _____
4. Outfall protection using rip-rap required _____
5. Chain link fence with slats required around basins >3 feet in depth _____
6. Pedestrian access ramps (if any) meets ADA requirements _____
7. Off-tract basins have an .access road around the basin _____
8. Easement boundary shown _____
9. Maximum sloped ratios for turfed or landscaped side slopes = 4:1 _____

G. GENERAL

1. Shows winterization procedures and erosion control measures _____
2. Copy of permit provided (if applicable) necessary for outfall _____

WATER

1. Design conforms to Design Standards and Standard Details for Construction _____
2. Design conforms to _____Water Master Plan _____
3. Minimum distances to sanitary sewer and storm lines maintained _____
4. Length shown as distance between crosses or tees _____
5. Air relief valves at high points _____
6. Invert elevations shown at all grade breaks and air relief valves _____
7. Sizes of all existing lines shown _____
8. Fire services shown. (if applicable) _____
9. Size and type of pipe shown in profile _____
10. Blowoffs at dead-end lines _____
11. Valves on all legs of a "cross" or "tee" _____
12. Minimum cover 36 inches _____
13. Minimum water service size 1 inch _____
14. Size and location of water services laterals and meter boxes shown _____
15. Fire Hydrant spacing per Design Standards section 4.600 _____
16. Valves spaced per Design Standards section 4.700 _____

STRUCTURAL PLANS

General Plan Sheets

1. Name of structure shown on Title Block. Name includes: "Bridge", "Underpass", "Overcrossing", etc., in the title _____
2. Bridge number and post mile _____
3. Plan View, Elevation, and Typical Section shown _____

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4.	Date of plans	_____
5.	Index to Plans	
	a. If not shown on General Plan; shown on Deck Contours Sheet	_____
6.	List of Standard Plans used	_____
7.	For structures on pile footings, the description of piles to be used, design loading, the probable tip elevation, if required, and the specified tip elevation shall be shown on the General Plan	_____
8.	Profile Grade shown	_____
	a. Grades, pertinent elevations and stations provided	_____
	b. Length of vertical curves	_____
9.	General Notes and Legend including notation of symbols	_____
10.	Traffic Handling and Falsework Assumptions provided	_____
	a. Falsework Openings	_____
	b. Temporary Vertical Clearance	_____
11.	Name or Initials of Project Engineer, Designer, Drafter	_____
12.	Location of Hydraulic Summary Plan	_____
13.	North Arrow	_____
14.	Scales shown and are Standard Scales	_____
15.	Station Line or Reference Line Shown	_____
	a. Station Line clearly designated	_____
	b. Stations should go from right to left	_____
	c. Alignment data provided	_____
16.	Traveled way, shoulder and median width of approach roadways shown	_____
17.	Top and toe of approach fill or cut	_____
18.	Slope of fill or cut shown	_____
19.	Horizontal clearance under structure (including future alignment)	_____
20.	Name and direction of stream flow	_____
21.	Name and direction of nearest towns and/or cities	_____
22.	Skew angle (between the normal or radial to centerline of structure and centerline of pier or abutment	_____
23.	Location of minimum vertical clearance	_____
24.	Deck drains and manholes shown	_____

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25.	Location for painting bridge number and structure name	
26.	BB and EB stations and elevation	
27.	Bank protection or slope paving	
28.	Centerline piers or bents (shown by only)	
29.	MBGR, Temporary railings and approach rail curb	
30.	Dimension between toe of slope and RR tracks	
31.	Approach slab, if any	
32.	Existing and Proposed Right of way shown	
33.	Existing Bridge shown and identified	
34.	Elevation is projected vertically from the lower side for the plan view	
	a. If Developed Elevation used it is labeled appropriately	
35.	Same scale as Plan view	
36.	Abutment and bent numbers	
37.	Datum line with elevation and stations	
38.	Original ground line at bridge centerline, or as noted	
39.	Total length of bridge (BB to EB)	
	a. Spans (BB to centerline piers and between centerline of piers)	
40.	Pile data	
41.	Bank protection or slope paving	
42.	Vertical clearance	
43.	Location of bridge number and structure name	
44.	Section shown looking up-station	
	a. If shown differently, section is identified by section cuts	
45.	Roadway/Bridge width dimensioned	
	a. Widths of traveled way, sidewalks, shoulders, and medians	
46.	Typical pier or bent shown	
47.	Location of profile grade	
48.	Superstructure thickness from top of deck to bottom of girder (or main slab)	
49.	Type of girders noted (steel, composite, non-composite, precast, precast -prestressed, or cast-in-place prestressed)	
50.	Width of barrier rail and type shown	
51.	Cross-slope or maximum superelevation	

		Checked By/Date/Comments
52.	Utilities and openings for future utilities	_____
53.	Traffic/Construction Staging shown	_____
	a. Dimensions of Temporary Travel Ways	_____
	b. K-rail shown	_____
54.	Utility sizes, material, use and owner provided Foundation Plan Sheets	_____

Foundation Plan Sheets

1.	Station/Reference Line data shown and agrees with General Plan	
	a. Layout information should be adequate for survey crew to stake locations of foundation elements	_____
2.	Existing contours and features shown	_____
3.	Locations of existing utilities	
	a. Utilities clearly identified	_____
4.	Station and Bearings of centerline of bents/piers and abutments	_____
5.	Footings/Piles shown	_____
	a. Layout information provided off of bridge Station/Reference Line	_____
6.	Bottom of footing elevations	_____
7.	Benchmark and Horizontal Control provided (if not provided elsewhere)	_____
8.	Hydrologic Summary	_____

Abutment Layout and Detail Sheets

1.	Plan View and Elevation View provided	_____
2.	If Details and Sections are shown on another sheet, references	
	i. to those sheets are provided	_____
3.	Plan view should be oriented the same as the General Plan unless	
	i. abutment is too long and then it should be oriented horizontal	_____
4.	North Arrow shown	_____
5.	Reference Line (centerline of abutment bearing) shown	_____
	a. Reference Line should be same as shown on Foundation Plan	
	b. Dimensions should be along Reference Line	_____
6.	Section cuts provided and referenced to detail sheets	_____

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7.	If spread footings used, layout (width and length) of footings shown	
	a. Dimensions provided from Reference Line	_____
8.	If pile supported foundations used, layout of piles shown	
	a. Dimensions provided from Reference Line	_____
9.	Length and layout data of wingwalls shown	_____
10.	Elevation is same scale as plan view	_____
11.	Locations of utility openings depicted	_____
12.	Details showing concrete reinforcing should be a minimum scale of 3/8"=1'-0"; preferred scale for concrete is ½"=1'-0"	_____
13.	Wingwall elevations shown normal to wall	_____
14.	Plan of footing/abutment corners are oriented the same as Plan View	_____
15.	Sections orientated as cut on Plan or Elevation Views	_____
16.	Sections and Details are cut from Plan, Elevation, or secondary views; not from other sections or details	_____
17.	Concrete reinforcing is clearly depicted and called out	_____
18.	Abutment Section calls out joint seal type and movement rating	_____
19.	Drainage details shown in Abutment and Wingwall Section and either called out or referenced to other details	_____

Bent/Pier Layout and Detail Sheets

1.	Plan View and Elevation View provided	_____
2.	If Details and Sections are shown on another sheet, references to those sheets are provided	_____
3.	North arrow shown on Plan View	_____
4.	Reference Line (centerline of abutment bearing) shown	
	a. Reference Line should be same as shown on Foundation Plan	_____
5.	Dimensions should be along Reference Line	_____
6.	Section cuts provided and referenced to detail sheets	_____
7.	Elevation should be placed below Plan and projected from Plan	
	a. Scale of Elevation matches Plan	_____
8.	Utility openings shown in Plan and Elevation	_____

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9. Elevation should show footings or piles
   a. Some reinforcing in columns and footings should be shown _____
   b. If small diameter piles shown, only some of the piles should be shown _____
10. Stirrup spacing shown along centerline bent/pier
   a. Usually shown in Elevation
   b. Show different bar configurations at columns _____
11. Detail and Sections cut on Plan and Elevation _____
12. Overhang reinforcing shown and called out _____
13. Details showing concrete reinforcing should be a minimum scale of 3/8"=1'-0"; preferred scale for concrete is ½"=1'-0" _____
14. Concrete reinforcing is clearly depicted and called out _____
15. Pile layouts should be provided on Footing (Pile Cap) Plan view
   a. Pile layout located from centerline column = centerline footing and centerline bent/pier _____
16. Bent/Pier Cap Section
   a. Layout data (width) provided _____
   b. Main longitudinal reinforcing shown _____
      i. Clearances to main longitudinal reinforcing shown
   c. Stirrups shown _____
   d. Bent/Pier cap detailing accounts for bridge skew _____
   e. Section showing column reinforcing shown and depicts bent/pier reinforcing and column reinforcing _____
   f. Soffit flares shown and dimensioned (if applicable) _____
17. Details for utility penetrations shown if Standard Plan details are not appropriate _____
18. Detail of how girders and bent/pier cap reinforcing come together in plan _____
19. Column Elevation and Section
   a. Column elevation may be incorporated into bent/pier elevation _____
   b. Size of column shown _____
   c. Spacing of column stirrups shown _____
   d. Column sections shows main longitudinal reinforcing _____
   e. Clearances provided _____

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20.	Pile Elevation and Section	
	a. Spacing of pile stirrups shown	_____
	b. Size of pile shown	_____
	c. Elevation delineates between pile and column	_____
	d. Pile sections shows main longitudinal reinforcing	_____
	e. Clearances provided	_____
21.	Typical Section and Partial Typical Section provided	
	a. Typical Section shows entire section of bridge	_____
	b. Partial Typical Section shows reinforcing	_____
21.	Details for skewed transverse deck reinforcing provided	_____
22.	Typical Section drawn looking up-station	_____
23.	Layout dimensions provided from Reference Line	
	a. Dimensions to girders provided	_____
	b. Overall Dimensions provided including edge of deck, sidewalks, medians, etc.	_____
24.	Girder widths shown (if girders width varies, noted on typical section)	_____
25.	Deck and soffit thicknesses provided	_____
26.	Overhang dimensions shown	_____
27.	Superstructure depth shown	_____
28.	Slope of sloping girders	_____
29.	Utility sizes, material, use and owner provided	_____
30.	Rail types shown	_____
31.	Partial Typical Section drawn below Typical Section	
	a. Scale should be minimum ½"=1'-0"	_____
32.	Concrete reinforcing is clearly depicted and called out	_____
33.	Reinforcing details from Standard Plans shown but not called out as individual bars	
	a. Standard Plan details called out	_____
34.	If variable bay spacing on girders is shown in Typical Section, reinforcing that is different than standard bays is detailed	_____
35.	Reinforcing clearances shown	_____
36.	Top and bottom transverse reinforcement size and spacing shown	
	a. Direction and layout of transverse reinforcing provided	_____
37.	Distribution reinforcing called out	_____

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38.	Reinforcing required per BDD called out	
39.	For precast girders, minimum haunch at midspan dimensioned	

Girder Layout Sheet

1.	Girder Layout Sheet includes Girder Layout Plan and Longitudinal Section	
2.	Girder Layout orientated same as General Plan	
3.	North Arrow shown	
4.	If intermediate diaphragms are required, they are oriented parallel to transverse deck reinforcement and dimensioned	
5.	Layout for variable bay spacing provided (if applicable)	
6.	For Precast and Steel Girders, the length of the girders and the girder bearings are detailed	
7.	Utility locations are identified	
8.	Utility sizes, material, use and owner provided	
9.	Transverse deck reinforcement layout is depicted	
10.	Details for transverse deck steel for skewed bridges provided	
11.	Soffit access openings dimensioned (if applicable)	
12.	Deck access openings dimensioned (if applicable)	
13.	Deck drainage shown and dimensioned (if not shown elsewhere)	
14.	Longitudinal Section shows stirrup spacing	
15.	Longitudinal Section shows soffit slab tapers and provides dimensions	
16.	Longitudinal Section shows prestressed cable path for prestressed bridges	
	a. Dimensions to inflections points shown and dimensioned from soffit slab	
17.	Camber diagram provided	
18.	Concrete Strength and Type Limits diagram shown	
19.	Prestressing Notes provided	
	a. Pjack noted	
	b. Jacking from one or two ends noted	
	c. Friction coefficient at point of no movement provided	
	d. Wobble and Friction Coefficients provided	

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20.	End diaphragm detail provided	
	a. Width of diaphragm shown	_____
	b. Prestressing grillage shown	_____
	c. Joint Seal Blockout shown	_____
	d. Limits of Transverse Reinforcement shown	_____

Girder Reinforcing Sheet

1.	Girder Reinforcing Plan orientated same as Girder Layout	_____
2.	Top Reinforcing and Bottom Reinforcing shown	_____
3.	Girder Reinforcing covers at least one frame of Girder Layout	_____
4.	Scale should typically match Girder Layout	_____
5.	Centerline of Bents/Piers and Hinges shown	_____
6.	Length of main longitudinal reinforcing shown	
	a. Lengths dimensioned from centerline of bents/piers	_____
7.	Main longitudinal bars are clearly delineated	_____
8.	Outside edge of exterior girder and centerline of girders shown	_____
9.	If bundled bars required, they are shown with bundle symbol and legend calls out symbol	_____
10.	Notes provided	
	a. Splicing in reinforcing is not allowed or ultimate couplers are called out	_____

Appendix 4
Comment & Response Form

General Project Information		Review Phase	Reviewer Information	
Dist:		☐ PSR/PDS (Review No.)	Reviewer Name:	
Proj ID (Phase):		☐ APS/PSR (Review No.)	Company:	
Project Name:		☐ APS/PR (Review No.)	Job Number	
Designer Firm:		☐ Type Selection	Phone Number:	
Designer Name:		☐ 65% PS&E Unchecked Details	e-mail:	
Phone:		☐ PS&E (Review No.)	Date of Review:	
E-mail:		☐ Construction	Structure Name*:	
		☐ Other:	Br No*:	
			(*Use if necessary when comment sheets are by individual structure)	

Consultant Information (to be filled in by Consultant)

Consultant Structure Lead (First and Last Name)	Structure Consultant Firm	Phone Number	E-mail	Response Date

#	Doc. (See Note 1)	Page, Section, or SSP	Comment Type See Note 2	Review Comments	PHASE 1 Designer Responses	✓
1.						
2.						
3.						
4.						

Note 1: Abbreviations for Typical Documents (if Abbr. is not below, type in the document type)					
SP=Structure Plans	SP=Special Provisions	FR=Foundation Rpt	DC=Design Calcs	TS=Type Sel. Report	QCC=Quant. Check Calcs
RP=Road Plans	E=Estimate	H=Hydraulics Rpt	CC=Check Calcs	QC=Quant. Calcs	

Note 2: Comment Type	
F	Fatal flaw must be revised
S	Serious problem, needs to be addressed, could escalate to "F" if left unattended
C	Coordination Problem, disciplines need to talk
N	Note to designer, item not serious, no need to incorporate, but could result in a better product in future

✓= Comment Resolved
(for Reviewer's use)

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Exhibit B

INSURANCE REQUIREMENTS
Consultant Service Agreement between City of Fresno ("CITY")
and Cornerstone Structural Engineering Group, Inc. ("CONSULTANT")
CITY Infrastructure Associated with the Construction of the California High-Speed Rail
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 Business 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, its 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. Architect's and engineer's coverage is to be endorsed to include contractual liability.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, SUBCONTRACTORS or SUB-CONSULTANTS ("CONSULTANT") 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:

1. **COMMERCIAL GENERAL LIABILITY**:

   (i) $1,000,000 per occurrence for bodily injury and property damage;
   (ii) $1,000,000 per occurrence for personal and advertising injury;
   (iii) $2,000,000 aggregate for products and completed operations; and,

(iv) $2,000,000 general aggregate applying separately to the work performed under the Agreement.

2. **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) $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 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, its 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, 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 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 the 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, 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.

3. For any claims related 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 as broad as that contained in 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:

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 after 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.

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.

Exhibit C

DISCLOSURE OF CONFLICT OF INTEREST

CITY Infrastructure Associated with the Construction of the California High-Speed Rail
PROJECT TITLE

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	☐	☐
2	Do you represent any firm, organization or person who is in litigation with the City of Fresno?	☐	☐
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?	☐	☐
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?	☐	☐
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?	☐	☐
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?	☐	☐
* If the answer to any question is yes, please explain in full below.			

Explanation: _____

_____

_____

_____

_____

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_____

Additional page(s) attached.

_____
Signature

_____
Date

_____
(name)

_____
(company)

_____
(address)

_____
(city state zip)

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