



Agenda Report

File #: 19-0648

AGENDA REPORT REQUEST FOR CITY COUNCIL ACTION

DATE: 07/17/19

TO: Honorable Mayor and City Council Members

FROM: Public Works Department

SUBJECT:

City Council consideration of Request for Proposal 18-035CA for Design Services for the Magnolia Avenue Bridge Widening from El Camino Avenue to 1,000 feet east of All American Way, City Project No. 2015-15, Federal Project No. STPL-5104 (046).

RECOMMENDED ACTION:

That the City Council:

1. Award Request for Proposal (RFP) 18-035CA, titled "Magnolia Avenue Bridge Widening from El Camino Avenue to 1,000 Feet East of All American Way," City Project No. 2015-15, Federal Project No. STPL-5104 (046), to CNS Engineers, Inc., for the total amount of \$1,167,083.49, and waive any and all minor irregularities in the proposal.
2. Approve the Professional Services Agreement with CNS Engineers, Inc., in the amount of \$1,167,083.49.
3. Authorize the City Manager, or his designee, to execute the Professional Services Agreement between the City and CNS Engineers, Inc., for the total amount of \$1,167,083.49.
4. Authorize the Purchasing Manager to issue a purchase order to CNS Engineers, Inc., for the total amount of \$1,167,083.49, and approve necessary change orders up to the amount provided by the Corona Municipal Code Section 3.08.070 (I).
5. Authorize the City Manager, or his designee, to negotiate and execute any amendment to the Professional Services Agreement, which are either non-substantive or are otherwise in compliance with the City Council's actions hereunder.
6. Authorize an appropriation of \$443,000 and increase revenue estimates by the same amount

in the Public Works Grants/Agreements Fund (Fund 243) for an existing Capital Improvement Project, titled "Design Services for the Magnolia Avenue Bridge Widening from El Camino Avenue to 1,000 Feet East of All American Way."

ANALYSIS:

In 2005, Riverside County Transportation Commission (RCTC) held a call for projects for Transportation Enhancement (TE) funds under the former State Transportation Improvement Program TE Program. The City's Magnolia Avenue Landscaped Median Project was approved for TE funds. The TE Program experienced delays, mainly due to changes in the TE Program under the recently approved Federal Transportation Bill, MAP-21. MAP-21 essentially eliminated the TE funds and RCTC subsequently approved replacing unobligated TE funds with Surface Transportation Program (STP) funds. The City met with RCTC programming staff to discuss the change in funding and the impacts on the original project concepts. It was determined that the scope of work and description for the proposed project would have to be revised to qualify for STP funding. It was determined that certain project components were deemed ineligible, such as landscaping and irrigation. As a result, it was determined that the scope of work and description for the proposed project would have to be revised to qualify for STP funding. Therefore, the City updated the scope of work to incorporate the widening of Magnolia Avenue between Interstate 15 and East Sixth Street, including the widening of the existing two-lane bridge over the Temescal Channel.

On November 15, 2017, the City Council adopted Resolution No. 2017-115, that executed Master Agreement No. 08-5104 F15 Administering Agency-State Agreement for federal-aid projects with the State of California, acting and through its Department of Transportation (Caltrans). In order to receive federal-aid funds for use on local transportation-related projects, the City of Corona, as the Administering Agency, is required to enter into a Master Agreement with Caltrans to establish the terms and conditions applicable to the City when receiving federal funds, and the subsequent operation and maintenance of the facility when construction is complete. The Master Agreement commits the City to comply with all federal and state laws, regulations, policies, and procedures relative to the design, right-of-way acquisition, environmental compliance, construction, and maintenance of the completed facility. The Master Agreement is occasionally updated and re-executed to account for changes in laws and policies.

On January 22, 2018, the City received from Caltrans, the fully executed copy of the Program Supplemental Agreement No. 030-F to the Administering Agency-State Agreement No. 08-5104F15. This Program Supplemental adopts and incorporates the Administering Agency-State Agreement for federal-aid, which was entered into between the Administering Agency and the State on December 7, 2017. This Program Supplemental is executed in accordance with Article 1 of the Master Agreement under authority of Resolution 2017-115 approved by the City Council on November 15, 2017.

Currently, Magnolia Avenue has three lanes in each direction between Interstate 15 and El Camino Avenue, which narrows to two lanes in each direction from El Camino to approximately 1,000 feet east of All American Way. The project will widen Magnolia Avenue to three (3) 12' lanes in each direction, with a 12' striped median on the bridge, landscape medians in other locations, 8' paved outside shoulders in both directions, and a 5' sidewalk on the north and south sides of the bridge, and construction of missing sidewalk within the project limits with ADA compliant ramps, bike lanes, new traffic signal design, and other ancillary improvements.

The consultant is also required to provide utility coordination, right-of-way engineering, which will

include the preparation of legal descriptions, plats, record of survey for acquisition purposes, estimated cost estimates for each parcel that is required to dedicate right-of-way, per Caltrans procedures, and to obtain Authorization (E-76) for right-of-way and utilities from Caltrans. Right-of-way purchasing is not a part of the consultant's work, but in Section 3 of the Special Covenants or Remarks, the right-of-way acquisition for construction of this project of the initial federal authorization for preliminary engineering is not started by the close of the tenth fiscal year following the fiscal year in which the project is authorized, the City will be required to repay the Federal Highway Administration through Caltrans funds under agreement 08-5104F15. The consultant will also be required to obtain a Section 404 Army Corp of Engineers permit, Section 401 Water Quality Certification Regional Water Quality Control Board, Streambed Alteration Agreement California Department of Fish and Game, Regional.

On March 9, 2018, RFP 18-035CA "Engineering Design Services for the Magnolia Avenue Bridge Widening from El Camino Avenue to 1,000 Feet East of All American Way" was formally advertised in the Sentinel Weekly News and posted on the City's Bid Opportunities web page. One (1) proposal was received by the due date of April 12, 2018.

The evaluation of the one proposal was based on seven criteria: 1) Understanding of the work to be done 2) Experience with similar kinds of projects 3) Quality of staff for work to be done 4) Capability of developing innovative or advanced techniques 5) Familiarity with state and federal procedures 6) Fiscal responsibility and 7) Demonstrated technical ability. The following is the proposal scoring results:

	FIRM	Location
1	CNS Engineers, Inc.	Riverside

CNS Engineers, Inc., was the only proposal received. The proposal was evaluated by City staff and found to be consistent with the requirements listed in the RFP. Since the City received only one proposal, the City had to submit to Caltrans a Cost-Effectiveness Determination / Public Interest Finding (PIF). The PIF was reviewed by Caltrans and approved on November 30, 2018. It is believed that CNS Engineers, Inc's., team possesses the skills and experience necessary to successfully execute the scope of work for the project. Steve Hosford, the Project Manager working with CNS Engineers, Inc., has over twenty (20) years' experience, with extensive experience managing and delivering complex, large-scale transportation projects. CNS Engineers, Inc., has over twenty (20) years of bridge design experience.

COMMITTEE ACTION:

Not applicable.

STRATEGIC PLAN:

This item supports the City's Strategic Plan Goal 1: Promote Public Safety; Objective C: Ensure adequate funding for investments and improvements in infrastructure that support public safety. Completion of the proposed project will repair, replace and install infrastructure improvements that contribute to the safety and mobility of Corona residents.

FISCAL IMPACT:

The estimated design and project management cost for this project is outlined as follows:

Design Cost..... \$1,167,083.49
Design Support..... \$75,000.00
Total Estimated Design and Support Costs..... \$1,242,083.49

With approval of the recommended actions, funding for the project will be available in the Capital Improvement Project Budget as follows:

Account Name	Fund	Account	Amount
Gas Tax	222	62410	\$100,000.00
Citywide Street Improvements	211	62410	\$506,321.07
Measure A	227	62410	\$1,313,775.19
Public Works Grants/Agreements	243	62410	\$443,000.00
Total			\$2,363,096.26

Fund	07/01/19 Est. Fund Balance	Budgeted Revenues/ Sources	Budgeted Expenditures/ Uses	Fund Balance Impacts	06/30/20 Est. Fund Balance
Public Works Grants/Agreements Fund 243	(\$112,230,619)	\$32,741,789	\$ -	\$443,000 Revenue (\$443,000) Appropriation	(\$79,488,830)

Note: Estimated negative ending fund balance due to reimbursements expected in future years.

ENVIRONMENTAL ANALYSIS:

State and Federal environmental documentation will be required to satisfy the CEQA and the NEPA in compliance with Caltrans Local Assistance Program. It is anticipated that the NEPA will be a Category Exemption and the CEQA will be an Initial Study/Mitigated Negative Declaration.

PREPARED BY: PETER RAMEY, P.E., PROJECT ENGINEER

REVIEWED BY: TOM KOPER, P.E., ASSISTANT PUBLIC WORKS DIRECTOR

REVIEWED BY: NELSON D. NELSON, P.E., PUBLIC WORKS DIRECTOR

REVIEWED BY: KIM SITTON, FINANCE MANAGER

REVIEWED BY: CITA LONGSWORTH, PURCHASING MANAGER

REVIEWED BY: KERRY D. EDEN, ASSISTANT CITY MANAGER/ADMINISTRATIVE SERVICES DIRECTOR

REVIEWED BY: MICHELE NISSEN, ASSISTANT CITY MANAGER

SUBMITTED BY: MITCHELL LANSDELL, ACTING CITY MANAGER

Attachments:

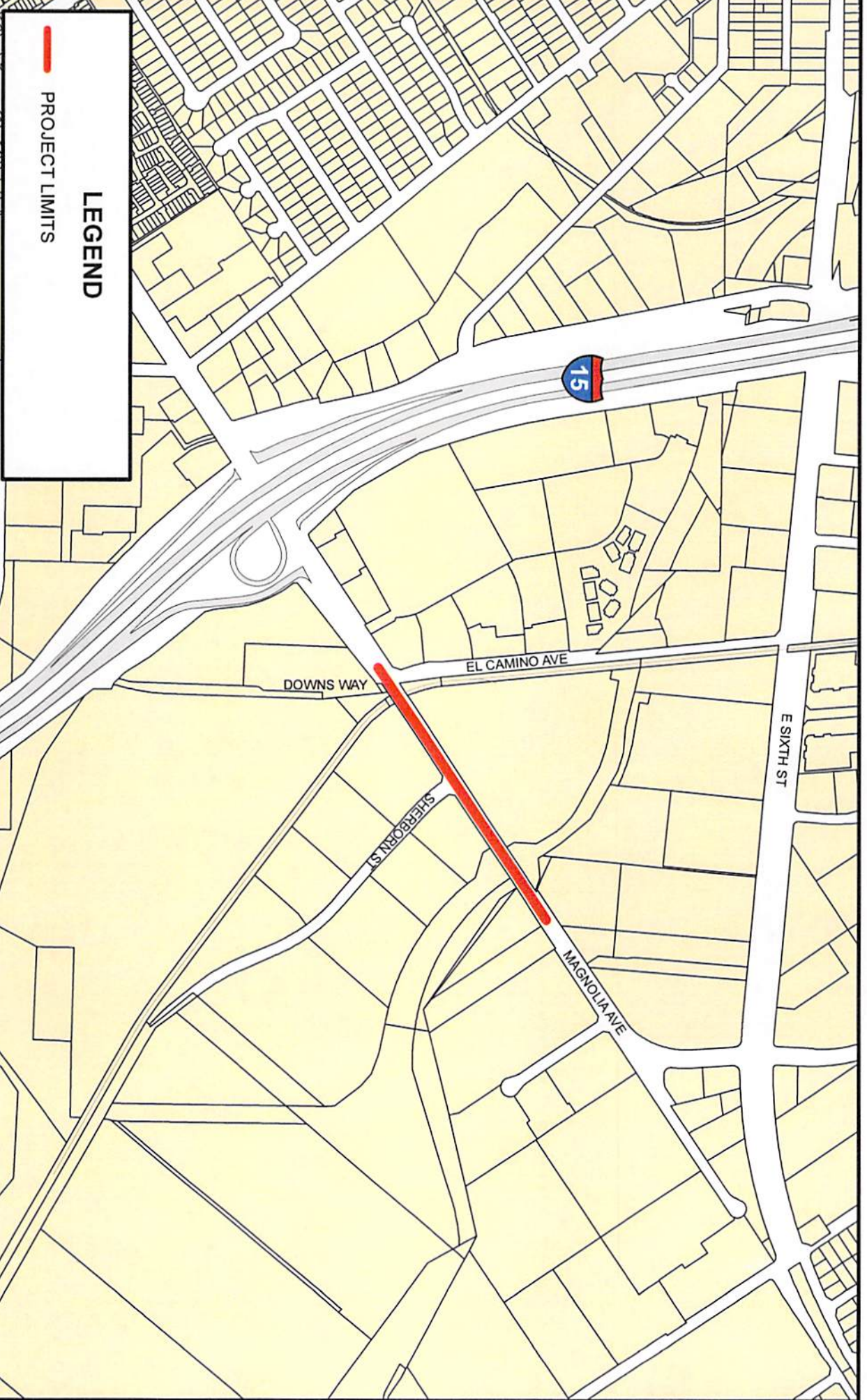
1. Exhibit "A" - Location Map
2. Professional Services Agreement



CITY OF CORONA

MAGNOLIA AVENUE BRIDGE WIDENING

PROJECT NO. 2015-15



**CITY OF CORONA
PROFESSIONAL SERVICES AGREEMENT
WITH CNS ENGINEERS, INC.
(BRIDGE MODIFICATION DESIGN SERVICES – MAGNOLIA AVENUE BRIDGE
WIDENING FROM EL CAMINO AVENUE TO 1,000 FEET EAST OF ALL
AMERICAN WAY CITY OF CORONA PROJECT NO. 2015-15, FEDERAL AID
PROJECT NO. STPL-5104 (046))**

1. PARTIES AND DATE.

This Agreement is made and entered into this **17th** day of **July, 2019** (“Effective Date”) by and between the City of Corona, a municipal corporation organized under the laws of the State of California with its principal place of business at 400 South Vicentia Avenue, Corona, California 92882 (“City”) and **CNS Engineers, Inc.**, a California corporation with its principal place of business at **11870 Pierce Street, Suite 265, Riverside, California 92505** (“Consultant”). City and Consultant are sometimes individually referred to as “Party” and collectively as “Parties” in this Agreement.

2. RECITALS.

2.1 Consultant.

Consultant desires to perform and assume responsibility for the provision of certain professional services required by the City on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing **bridge modification design** services to public clients, is licensed in the State of California, and is familiar with the plans of City.

2.2 Project.

City desires to engage Consultant to render such services for the **Magnolia Bridge Widening, City of Corona Project No. 2015-15, RFP No. 18-035CA, Federal Aid Project No. STPL-5104 (046)** (“Project”) as set forth in this Agreement.

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Consultant promises and agrees to furnish to the City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional **bridge modification design** services necessary for the Project (“Services”). The Services are more particularly described in Exhibit “A” attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules, and regulations.

3.1.2 Term. The term of this Agreement shall be from **July 17, 2019 to November 30, 2022** ("Term"), unless earlier terminated as provided herein. Consultant shall complete the Services within the Term of this Agreement, and shall meet any other established schedules and deadlines. The Parties may, by mutual, written consent, extend the Term of this Agreement one or more times by executing a written amendment pursuant to Section 3.6.8 below (each a "Renewal Term"). The terms "Term" and "Renewal Term" may sometimes be generally and collectively referred to as "Term" in this Agreement.

3.2 Responsibilities of Consultant.

3.2.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. City retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the Term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of City and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.2.2 Schedule of Services. Consultant shall perform the Services within the Term of this Agreement, in accordance with the Schedule of Services set forth in Exhibit "B" attached hereto and incorporated herein by reference, and in accordance with any other completion schedule or milestones which may be separately agreed upon in writing by the Parties. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, City shall respond to Consultant's submittals in a timely manner. Upon request of City, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.2.3 Conformance to Applicable Requirements. All Services performed by Consultant shall be subject to the approval of City.

3.2.4 Substitution of Key Personnel. Consultant has represented to City that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval of City. In the event that City and Consultant cannot agree as to the substitution of key personnel, City shall be entitled to terminate this Agreement for cause. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to the City, or who are determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a

threat to the safety of persons or property, shall be promptly removed from the Project by the Consultant at the request of the City. The key personnel for performance of this Agreement are as follows: **Steve Hosford, PE.**

3.2.5 City's Representative. The City hereby designates **Nelson D. Nelson, PE, Public Works Director** or his designee, to act as its representative for the performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Contract. Consultant shall not accept direction or orders from any person other than the City's Representative or his or her designee.

3.2.6 Consultant's Representative. Consultant hereby designates **James J. Lu, P.E., S.E.,** or his designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences, and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.2.7 Coordination of Services. Consultant agrees to work closely with City staff in the performance of Services and shall be available to City's staff, consultants and other staff at all reasonable times.

3.2.8 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant agrees that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subconsultants shall have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a City Business License, and that such licenses and approvals shall be maintained throughout the Term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein. Any employee of the Consultant or its sub-consultants who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

3.2.9 Laws and Regulations; Employee/Labor Certifications. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all

Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work or Services knowing them to be contrary to such laws, rules and regulations and without giving written notice to the City, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold City, its officials, directors, officers, employees, and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.9.1 Employment Eligibility; Consultant. By executing this Agreement, Consultant verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Consultant. Consultant also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Agreement, and shall not violate any such law at any time during the Term of the Agreement. Consultant shall avoid any violation of any such law during the Term of this Agreement by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Consultant shall maintain records of each such verification, and shall make them available to the City or its representatives for inspection and copy at any time during normal business hours. The City shall not be responsible for any costs or expenses related to Consultant's compliance with the requirements provided for in Section 3.2.9 or any of its sub-sections.

3.2.9.2 Employment Eligibility; Subcontractors, Consultants, Sub-subcontractors and Subconsultants. To the same extent and under the same conditions as Consultant, Consultant shall require all of its subcontractors, consultants, sub-subcontractors and subconsultants performing any work or Services relating to the Project or this Agreement to make the same verifications and comply with all requirements and restrictions provided for in Section 3.2.9.1.

3.2.9.3 Employment Eligibility; Failure to Comply. Each person executing this Agreement on behalf of Consultant verifies that they are a duly authorized officer of Consultant, and understands that any of the following shall be grounds for the City to terminate the Agreement for cause: (1) failure of Consultant or its subcontractors, consultants, sub-subcontractors or subconsultants to meet any of the requirements provided for in Sections 3.2.9.1 or 3.2.9.2; (2) any misrepresentation or material omission concerning compliance with such requirements (including in those verifications provided to the Consultant under Section 3.2.9.2); or (3) failure to immediately remove from the Project any person found not to be in compliance with such requirements.

3.2.9.4 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.2.9.5 Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of City's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

3.2.9.6 Air Quality. To the extent applicable, Consultant must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Consultant shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Consultant shall indemnify City against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Consultant, its subconsultants, or others for whom Consultant is responsible under its indemnity obligations provided for in this Agreement.

3.2.10 Insurance.

3.2.10.1 Time for Compliance. Promptly following the Effective Date of this Agreement, but in no event before Consultant commences any Services under this Agreement, Consultant shall provide evidence satisfactory to the City that it has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Agreement for cause.

3.2.10.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subconsultants. Consultant shall also require all of its subconsultants to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office

Commercial General Liability coverage (occurrence form CG 0001); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto), or if Consultant has no owned autos, Code 8 (hired) and 9 (non-owned); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(B) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability*: **\$2,000,000** per occurrence for bodily injury, personal injury, advertising injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used including, but not limited to, form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability*: **\$2,000,000** per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of **\$1,000,000** per accident for bodily injury or disease.

3.2.10.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than **\$3,000,000** per occurrence or claim, **\$3,000,000** aggregate.

3.2.10.4 Insurance Endorsements. The insurance policies shall contain or be endorsed (amended) to include the following provisions:

(A) General Liability. The general liability policy shall state that: (1) the City, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured with respect to liability arising out of work or operations performed by or on behalf of the Consultant, including materials, parts or equipment furnished in connection therewith (the endorsement form shall be at least as broad as ISO Form CG 20 10 11 85 or both CG 20 37 and one of the following: CG 20 10, CG 20 26, CG 20 33 or CG 20 38); and (2) the insurance coverage shall be primary insurance coverage as respects the City, its directors, officials, officers, employees, agents, and volunteers (the endorsement form shall be at least as broad as ISO CG 20 01 04 13). Any insurance or self-insurance maintained by the City, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way.

(B) Waiver of Subrogation – Workers' Compensation and Employer's Liability Coverage. The insurer shall agree to waive all rights of subrogation against the City, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy which arise from work or Services performed by the Consultant.

(C) All Coverages. If Consultant maintains broader coverage and/or higher limits than the minimums shown above, the City is entitled to the broader coverage and/or higher limits maintained by Consultant. Thus, any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

3.2.10.5 Other Provisions; Endorsements Preferred. Consultant shall endeavor to provide endorsements regarding the following provisions, but nonetheless understands, acknowledges and agrees that the following provisions shall apply and that failure to comply shall be considered to be a breach of this Agreement by Consultant:

(A) Waiver of Subrogation – All Other Policies. Consultant hereby waives all rights of subrogation any insurer of Consultant's may acquire against the City, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of any insurance policy which arise from work or Services performed by the Consultant. Consultant understands, acknowledges and agrees that this provision is in full force and effect even if the City does not receive a waiver of subrogation endorsement from the insurer.

(B) Notice. Consultant shall either: (1) require its insurer to provide thirty (30) days prior written notice to the City before coverage is suspended, voided, or canceled; or (2) notify City in writing that such notice is not available and forward any notice of such actions to the City within two (2) business days from date of receipt by Consultant. Consultant understands, acknowledges and agrees that this provision is in full force and effect even if the City does not receive a waiver of subrogation endorsement from the insurer.

3.2.10.6 Claims Made Policies. The following provisions shall apply to all policies that provide coverage on a claims-made basis: (A) the retroactive date must be shown and must be before the date on which any Services under this Agreement commence; (B) the insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Project; and (C) if coverage is canceled or not renewed and is not replaced with another claims-made policy with a retroactive date prior to the date on which any Services under this Agreement commence, Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of Project.

3.2.10.7 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the Consultant to provide proof of ability to pay losses and related investigation, claims administration and defense expenses within the deductible or self-insured retention. The deductible or self-insured retention may be satisfied by either the named insured or the City.

3.2.10.8 Acceptability of Insurers. Unless under the circumstances a different rating is otherwise acceptable to the City in its sole and absolute discretion, insurance is to be placed with insurers which are satisfactory to the City and which meet either of the following criteria : (1) an insurer with a current A.M. Best's rating no less than A-:VII and licensed as an admitted insurance carrier in California; or (2) an insurer with a current A.M. Best's rating no less than A-:X and authorized to issue the required policies in California.

3.2.10.9 Verification of Coverage. Consultant shall furnish City with original certificates of insurance, as well as amendatory endorsements or copies of the applicable policy language effecting coverage required by this Agreement. All documents must be received and approved by the City before any Services commence; provided, however, that failure to obtain the required documents prior to the commencement of Services shall not waive Consultant's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.2.10.10 Reporting of Claims. Consultant shall report to the City, in addition to Consultant's insurer, any and all insurance claims submitted by Consultant in connection with the Services under this Agreement.

3.2.10.11 Sub-Consultants. All sub-consultants shall comply with each and every insurance provision of this Section 3.2.10. Consultant shall therefore not allow any sub-consultant to commence work on any subcontract to perform any part of the Services until it has provided evidence satisfactory to the City that the sub-consultant has secured all insurance required under this Agreement.

3.2.10.12 Special Risk or Circumstances. The City reserves the right, in its sole and absolute discretion, to modify the requirements of this Section 3.2.10, including limits, based on any of the following: (A) the nature of the risk of the Services; (B) the prior experience of the insured; (C) the rating or other quality or characteristic of the insurer; (D) any special or unique coverage issues; and (E) any other special or unique circumstances.

3.2.11 Safety. Consultant shall execute and maintain its work and Services so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the Services and the conditions under which the Services are to be performed.

3.2.12 Payment Bond. The California Department of Industrial Relations ("DIR") has communicated to the City that there is a possibility that a payment bond may be required for certain services provided in connection with a public works project. Since such a requirement is currently contrary to the industry standard for the services provided by Consultant under this Agreement and since there is no direct legal authority for this position, the City is not requiring Consultant to provide a payment bond at this time. However, the City hereby reserves the right to require the Consultant to obtain and provide a payment bond for some or all of the Services provided by the Consultant under this Agreement.

If the City determines that a payment bond is required for the Services pursuant to Civil Code Section 9550 or any other applicable law, rule or regulation, Consultant shall execute and provide to City a payment bond in an amount required by the City and in a form provided or approved by the City. In the event a payment bond is required, the City agrees to compensate Consultant for all documented direct costs incurred by Consultant for such payment bond. The

Parties shall memorialize the terms of such additional compensation and any other terms and conditions associated with the payment bond in an amendment to this Agreement.

3.2.13 Accounting Records. Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

3.3 Fees and Payments.

3.3.1 Rates & Total Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" attached hereto and incorporated herein by reference. The total compensation, including authorized reimbursements, shall not exceed **one million one hundred sixty-seven thousand eighty-three dollars and forty-nine cents (\$1,167,083.49)** ("Total Compensation"), without written approval of City's Representative. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.3.2 Payment of Compensation. Consultant shall submit to City a monthly itemized statement which indicates work completed and hours of Services rendered by Consultant. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. City shall, within 30 days of receiving such statement, review the statement and pay all approved charges thereon.

3.3.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by City.

3.3.4 Extra Work. At any time during the Term of this Agreement, City may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by City to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization from City's Representative.

3.3.5 Prevailing Wages. Consultant is aware of the requirements of Chapter 1 (beginning at Section 1720 et seq.) of Part 7 of Division 2 of the California Labor Code, as well as Title 8, Section 16000 et seq. of the California Code of Regulations ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. If the Services involve federal funds or otherwise require compliance with the Davis-Bacon Fair Labor Standards Act, the

Consultant and its subconsultants shall comply with the higher of the state or federal prevailing wage rates, and the "Prevailing Wage Laws" shall be deemed to include such federal wages laws. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the Total Compensation is \$1,000 or more, Consultant and its subconsultants shall fully comply with the Prevailing Wage Laws for their employees and any others to whom such laws are applicable. Consultant and its subconsultants shall also be responsible for any and all violations and fines imposed on them pursuant to the Prevailing Wage Laws. Pursuant to SB 854, which amended the Prevailing Wage Laws, this Agreement would also be subject to compliance monitoring and enforcement by the California Department of Industrial Relations ("DIR"). Beginning April 1, 2015, no consultant or subconsultant may be awarded this Agreement unless registered with the DIR pursuant to Labor Code Section 1725.5. The City will report all necessary agreements to the DIR as required by the Prevailing Wage Laws. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the Project site. It is most efficient for the Consultant to obtain a copy of the prevailing wages in effect at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the DIR located at www.dir.ca.gov/dlsr/. In the alternative, Consultant may obtain a copy of the prevailing wages from the City's Representative. Consultant shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

3.3.6 Apprenticeable Crafts. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, Consultant shall comply with the provisions of Section 1777.5 of the California Labor Code with respect to the employment of properly registered apprentices upon public works when Consultant employs workmen in an apprenticeable craft or trade. The primary responsibility for compliance with said section for all apprenticeable occupations shall be with Consultant.

3.4 Termination of Agreement.

3.4.1 Grounds for Termination. City may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those Services which have been adequately rendered to City, as well as any authorized reimbursable expenses, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

3.4.2 Effect of Termination. If this Agreement is terminated as provided herein, City may require Consultant to provide all finished or unfinished Documents and Data and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such document and other information within fifteen (15) days of the request.

3.4.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.5 Ownership of Materials and Confidentiality.

3.5.1 Documents & Data; Licensing of Intellectual Property. This Agreement creates a non-exclusive and perpetual license for City to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically, electronically or otherwise recorded or stored, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data"). All Documents & Data shall be and remain the property of City, and shall not be used in whole or in substantial part by Consultant on other projects without the City's express written permission. Within thirty (30) days following the completion, suspension, abandonment or termination of this Agreement, Consultant shall provide to City reproducible copies of all Documents & Data, in a form and amount required by City. City reserves the right to select the method of document reproduction and to establish where the reproduction will be accomplished. The reproduction expense shall be borne by City at the actual cost of duplication. In the event of a dispute regarding the amount of compensation to which the Consultant is entitled under the termination provisions of this Agreement, Consultant shall provide all Documents & Data to City upon payment of the undisputed amount. Consultant shall have no right to retain or fail to provide to City any such documents pending resolution of the dispute. In addition, Consultant shall retain copies of all Documents & Data on file for a minimum of five (5) years following completion of the Project, and shall make copies available to City upon the payment of actual reasonable duplication costs. In addition, before destroying the Documents & Data following this retention period, Consultant shall make a reasonable effort to notify City and provide City with the opportunity to obtain the documents.

3.5.2 Subconsultants. Consultant shall require all subconsultants to agree in writing that City is granted a non-exclusive and perpetual license for any Documents & Data the subconsultant prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or its subconsultants, or those provided to Consultant by the City.

3.5.3 Right to Use. City shall not be limited in any way in its use or reuse of the Documents and Data or any part of them at any time for purposes of this Project or another project, provided that any such use not within the purposes intended by this Agreement or on a project other than this Project without employing the services of Consultant shall be at City's sole risk. If City uses or reuses the Documents & Data on any project other than this Project, it shall remove the Consultant's seal from the Documents & Data and indemnify and hold harmless

Consultant and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Documents & Data on such other project. Consultant shall be responsible and liable for its Documents & Data, pursuant to the terms of this Agreement, only with respect to the condition of the Documents & Data at the time they are provided to the City upon completion, suspension, abandonment or termination. Consultant shall not be responsible or liable for any revisions to the Documents & Data made by any party other than Consultant, a party for whom the Consultant is legally responsible or liable, or anyone approved by the Consultant.

3.5.4 Indemnification. Consultant shall defend, indemnify and hold the City, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by City of the Documents & Data, including any method, process, product, or concept specified or depicted.

3.5.5 Confidentiality. All Documents & Data, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant. All Documents & Data shall not, without the prior written consent of City, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause or facilitate the disclosure of the Documents & Data to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant that is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of City.

3.6 General Provisions.

3.6.1 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective Parties may provide in writing for this purpose:

Consultant:

CNS Engineers, Inc.
11870 Pierce Street, Suite 265
Riverside, CA 92505
Attn James J. Lu, PE, SE
President

City:

City of Corona
400 South Vicentia Avenue
Corona, CA 92882
Attn: Nelson D. Nelson, PE, Public Works Director
Public Works Department

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.6.2 Indemnification. To the fullest extent permitted by law, Consultant shall defend (with counsel of City's choosing), indemnify and hold the City, its directors, officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, to the extent arising out of, pertaining to, or incident to any alleged willful misconduct or negligent acts, errors or omissions of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant's Services, the Project or this Agreement, including without limitation the payment of all settlement amounts, expert witness fees and attorneys fees and other related costs and expenses. Notwithstanding the foregoing, to the extent Consultant's Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant. Consultant's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by the City, its directors, officials officers, employees, agents, or volunteers.

3.6.3 Governing Law; Government Code Claim Compliance. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Consultant must comply with the claim procedures set forth in Government Code Sections 900 et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Consultant. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Consultant shall be barred from bringing and maintaining a valid lawsuit against the City.

3.6.4 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.6.5 City's Right to Employ Other Consultants. City reserves right to employ other consultants in connection with this Project.

3.6.6 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

3.6.6.1 Subconsultants; Assignment or Transfer. Consultant shall not subcontract any portion of the Services required under this Agreement, except as expressly authorized herein, without the prior written approval of the City. Subcontracts, if any, shall include a provision making them subject to all provisions of this Agreement. Consultant shall also not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the City. Any attempt to subcontract or take any other action not authorized herein shall be null and void, and any subconsultants, assignees, hypothecates or transferees shall acquire no right or interest by reason of such action.

3.6.7 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subconsultants of Consultant, except as otherwise specified in this Agreement. All references to City include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

3.6.8 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.6.9 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

3.6.10 No Third Party Beneficiaries. Except to the extent expressly provided for in Section 3.6.6, there are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.6.11 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.6.12 Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not

paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Consultant further agrees to file, or shall cause its employees or subconsultants to file, a Statement of Economic Interest with the City's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability. For the Term of this Agreement, no member, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.6.13 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.6.14 Attorney's Fees. If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorney's fees and all other costs of such action.

3.6.15 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.6.16 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.6.17 Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both Parties.

3.6.18 Federal Provisions. When funding for the Services is provided, in whole or in part, by an agency of the federal government, Consultant shall also fully and adequately comply with the provisions included in Exhibit "D" (Federal Requirements) attached hereto and incorporated herein by reference ("Federal Requirements"). With respect to any conflict between such Federal Requirements and the terms of this Agreement and/or the provisions of state law, the more stringent requirement shall control.

[SIGNATURES ON NEXT 2 PAGES]

CITY'S SIGNATURE PAGE FOR
CITY OF CORONA
PROFESSIONAL SERVICES AGREEMENT
WITH CNS ENGINEERS, INC.
(BRIDGE MODIFICATION DESIGN SERVICES – MAGNOLIA AVENUE BRIDGE
WIDENING FROM EL CAMINO AVENUE TO 1,000 FEET EAST OF ALL
AMERICAN WAY CITY OF CORONA PROJECT NO. 2015-15, FEDERAL AID
PROJECT NO. STPL-5104 (046))

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the date first written above.

CITY OF CORONA

By: _____
Nelson D. Nelson, PE
Public Works Director

Reviewed By:

Tom Koper, PE
Assistant Public Works Director/City Engineer

Reviewed By:

Cita Longworth
Purchasing Manager

Attest:

Sylvia Edwards, City Clerk
City of Corona, California

CONSULTANT'S SIGNATURE PAGE FOR
CITY OF CORONA
PROFESSIONAL SERVICES AGREEMENT
WITH CNS ENGINEERS, INC.
(BRIDGE MODIFICATION DESIGN SERVICES – MAGNOLIA AVENUE BRIDGE
WIDENING FROM EL CAMINO AVENUE TO 1,000 FEET EAST OF ALL
AMERICAN WAY CITY OF CORONA PROJECT NO. 2015-15, FEDERAL AID
PROJECT NO. STPL-5104 (046))

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the date first written above.

CNS ENGINEERS, INC.
a California corporation

By: _____
Signature

Name

Title (CEO, President, or V.P.)

By: _____
Signature

Name

Title (Secretary, Treasurer, or CFO)

EXHIBIT "A"

SCOPE OF SERVICES

Consultant shall prepare all reports, studies and plans to meet the requirements of the Project. Also included are data collection, coordination with utilities and other affected agencies, cost opinions, bid sheets, and technical specifications for the above described project as required. The Project will use Greenbook specifications and Caltrans where applicable. Consultant will prepare and provide Greenbook formatted special provisions for project-specific requirements not otherwise provided in the Greenbook or Caltrans specifications. All engineering work shall be performed by a Professional Engineer registered in the State of California. All surveying work shall be performed by a Licensed Surveyor registered in the State of California. All reports, plans, and cost opinions will be to a level of professional competence that is common among engineers performing like services. All final reports, plans, technical specifications, and cost opinions shall be stamped and signed by the Civil Engineer responsible for the work.

Prepare and submit permit applications as applicable; attend and organize meetings; revise and edit permit applications, plans, and exhibits as needed; and follow up with the agencies as needed to assist the City in securing all required permits. City to pay all permit fees.

Prepare plans in AutoCAD 2015 .dwg format and provide a CD (or DVD) to City in this format containing the plans (including all xrefs) along with PDF files.

Prepare final drawings for bidding and construction on 24-inch x 36-inch bond paper. Prepare record drawings (As-Builts) on 24-inch x 36-inch mylar after completion of project. The original drawings and digital files shall be the property of the City.

1. Data Collection

The Project will involve the review and assimilation of a large amount of existing data and the generation of new data. Consultant shall perform all research of agency records, as necessary, to secure the information, clearances, and/or plan review services required to identify, locate, and accurately layout all of the underground improvements and easements, centerline, ROW, and private property lines.

Consultant shall perform all research of private development plans adjacent to or affecting the Project site, as necessary, to secure the information, clearances, and/or plan review services required to identify, locate, and accurately layout all of the underground improvements and easements, centerline, ROW, and private property lines. Consultant will determine what data sources are necessary to gather and by what date, and to prioritize the gathering of that data. Consultant shall research and review all previous work performed to date in the Project vicinity that impacts the design of the improvements, including but not limited to:

- a. Existing improvement plans/engineering reports of record
- b. Right-of-way mapping, ownership records (Title Reports)

- c. Preliminary engineering and reports for this Project
- d. Environmental clearance and mitigation measures
- e. City/other agency engineering design standards, codes, and plan processing procedures

Consultant shall positively locate all utilities in accordance with underground utilities to determine the depth for clearance and connection points or conflicts for any underground improvements, such as gas lines, sewer lines, storm drains, or water lines. Consultant shall submit to each utility company a preliminary set of plans that provide the location, elevation of the utility, and the elevation of the improvement, with the conflict area clouded to show the utility companies the areas of conflict with the proposed improvement. Potholing information and plan shall be submitted to the City after completion of this task. If an area of possible conflict was not potholed during the project design phase and City determines that additional potholing is required, Consultant shall pothole the area to verify the conflicts at no additional cost to the City.

The City expects that the selected team will make the best use of existing data to minimize waste and duplication of work efforts.

2. Coordination

Consultant shall coordinate with other involved agencies and private developers for compatible design and phasing of construction with existing and proposed conditions. Coordination may include, but will not necessarily be limited to the following:

- a. BNSF Railroad
- b. Federal Highway Administration
- c. Nationwide permit through the ACOE, pursuant to Section 404 of the Clean Water Act.
- d. Riverside County Flood Control and Water Conservation District (RCFC&WCD).
- e. A Section 1600 Streambed Alteration Agreement with the California Dept. of Fish and Game.
- f. A Section 401 Certification or waiver from the Region 4 of the Regional Water Quality Control Board.
- g. Utility Companies

Caltrans will exercise review and approval function through the City's Project Manager at key points in the development process. All contacts with Caltrans will be directed through the City's Project Manager. Milestone Project design reviews will be performed for the specific products and deliverables listed herein. The City's Project Manager will conduct these reviews, in addition to the monthly project status reports and meetings. All meetings with other outside agencies will be scheduled by Consultant with approval of City.

Consultant shall supply to other agencies and utility companies the minimum number of sets required by them for their review along with any other required data, including permit applications. Process plans and technical specifications to obtain permits/approval from other agencies as required for construction of the improvements. Permit application fees will be reimbursed, and/or paid for, by the City for the amount stipulated on the permit or receipt.

3. Standards

The Project plans, specifications, and estimates shall be prepared in accordance with current Caltrans' regulations, policies, procedures, manuals, and standards including compliance with Federal Highway Administration (FHWA) requirements. Improvements of local roads may be prepared in accordance with City standards in lieu of Caltrans standards as directed by City. All Documents shall be prepared using US standards and dimensions.

4. Site Survey

All surveys shall be performed by Consultant in accordance with the current Caltrans "Survey Manual" and its revisions. Work not covered by the manual shall be performed in accordance with accepted professional surveying standards. Consultant shall be responsible to verify datum with the City.

The surveyor shall complete a topographic survey map of the site to prepare a base map for the street improvement plans, bridge plans, and right of way engineering. The field survey will also be required to provide existing property corners (for determination of right of way take), spot elevations, identify any unknown features, identify all known existing utilities in the street and on private property, cross sections, and add a greater level of detail for the Riverside County Flood Control and Water Conservation District (RCFC&WCD) channel crossing. Develop a base map of the proposed alignment, including public right of way and proposed right of way take with new legal descriptions, Plats, Record of Survey, property lot lines, street centerlines, bench marks and monuments, Control points shall be confirmed and shown on the plans, conduct site visit to identify all existing improvements and conditions that may affect the design and construction of the proposed project. and existing site conditions.

5. Design

Roadway, Bridge, Landscape and Irrigation design shall be in accordance with the current Caltrans Design Manuals and revisions. Basic design shall be in accordance with the approved Project Report and final environmental document with supplements and updates.

Bridge plans shall be prepared in accordance with the Caltrans Bridge Design Details Manual, Bridge Design Aids Manual, and Bridge Memos to Designers, Division of Structures current edition.

Roadway plans shall be prepared in conformance with the current Caltrans standards and requirements. All Roadway plans shall be on single sheet files. Graphic files shall conform to the Caltrans current standards and requirements for Data Format.

Landscape and Irrigation plans shall be prepared in conformance with City's Specific Plan, City's Water Conservation Ordinance and Caltrans standards and requirements. Irrigation Plans shall be prepared based on use of City's Reclaimed Water, and in conformance with standards of the Department of Health Services.

Special Provisions shall be prepared using Microsoft Word conforming to Caltrans format and content. Bridge Specifications shall be prepared in conformance with the Caltrans Bridge Design Specifications, Division of Structures current edition.

All plans for roadways or related facilities within City jurisdiction shall conform to the City's Standard Plans and design standards.

The responsible Consultant/Engineer shall sign all Plans, Specifications, and Estimates (PS&E) and engineering data furnished by him/her, and where appropriate, indicate his/her California registration number.

There is an existing RCFC&WCD channel (Temescal Wash) that the Magnolia Bridge crosses. Consultant shall verify with all utilities if they require additional utility crossing over the channel utilizing the bridge widening as utility support. The exact method of suspension or crossing shall be proposed by the designer and coordinated with the various utilities and Riverside County Flood Control and Water Conservation District for approval prior to actual design. Structural Calculations are required by Caltrans and RCFC&WCD.

6. PS&E

Plans and specifications shall be prepared in conformance with the current editions of the Caltrans Guide for Submittal of Plans, Specifications, Estimates, Standard Plans, Standard Specifications, and Standard Special Provisions. As part of the work involved in the preparation of the plans, specifications and estimate, Consultant shall prepare and furnish special provisions for items of work included in the plans which are not covered in the Standard Specifications, Caltrans-approved standard special provisions, and City approved standard special provisions.

Bridge plans shall be prepared in accordance with the Caltrans Bridge Design Details Manual, Bridge Design Aids Manual, and Bridge Memos to Designers, Division of Structures current edition.

Roadway plans shall be prepared in conformance with the current Caltrans standards and requirements. All Roadway plans shall be on single sheet files. Graphic files shall conform to the Caltrans current standards and requirements for Data Format.

Landscape and Irrigation plans shall be prepared in conformance with City's Specific Plan, City's Water Conservation Ordinance and Caltrans standards and requirements. Irrigation Plans shall be prepared based on use of City's Reclaimed Water, and in conformance with standards of the Department of Health Services.

Special Provisions shall be prepared using Microsoft Word conforming to Caltrans format and content. Bridge Specifications shall be prepared in conformance with the Caltrans Bridge Design Specifications, Division of Structures current edition.

All plans for roadways or related facilities within City jurisdiction shall conform to the City's Standard Plans and design standards.

The responsible Consultant/Engineer shall sign all Plans, Specifications, and Estimates (PS&E) and engineering data furnished by him/her, and where appropriate, indicate his/her California registration number.

7. Geotechnical Design Report

A qualified geotechnical engineer shall prepare a draft Geotechnical Design Report (GDR). All reports shall be prepared in accordance with Caltrans procedures, regulations, manuals, standards, policies, and format. The pavement structural sections shall be determined by a qualified Geotechnical Engineer in accordance with Caltrans policies and procedures.

A qualified geotechnical engineer shall prepare a Preliminary Foundation Report in accordance with Caltrans requirements. Sufficient borings and material samples shall be taken to determine the road structural section and slope stability. Consultant shall propose a Traffic Index (TI) for the all lanes and obtain City and Caltrans concurrence. Consultant shall notify Underground Service Alert and provide traffic control.

8. Environmental Documentation (ED)

Consultant shall prepare a new Environmental Evaluation document in accordance with Caltrans and federal guidelines and procedures. Consultant shall prepare the Purpose and Need and other required documents. Consultant will prepare the necessary technical studies and ED pursuant to CEQA, NEPA, and related requirements for the proposed Project, to address, as appropriate, traffic, noise impacts, air quality, lighting, wetlands, floodplains, wildlife and plants, historic and cultural resources, social and economic factors, parklands and recreational areas, hazardous waste, aerially deposited lead, water quality, energy, and visual effects. Once the appropriate level of ED has been identified, the ED and supporting technical studies will be submitted to the City, Caltrans, and FHWA, as appropriate, for review and approval. In addition to preparing the environmental documentation, Consultant will also be responsible for the CEQA and NEPA public involvement processes. Consultant shall identify likely permits and shall assist Caltrans and the City in coordinating with permitting agencies.

9. Hazardous Materials/Waste Site Assessment.

Consultant will perform and prepare an intrusive site investigation to determine if there are any known or potential hazardous materials within the proposed project limits. Consultant shall also perform asbestos survey for structure demolition or modification, and for aurally deposited lead within the right-of-way.

10. Calculations

All roadway calculations and structural analyses and design will be performed using Caltrans current standards and requirements. Data files and results will be submitted in a Digital Media format and hard copies.

11. Computer Aided Drafting and Design (CADD)

All plans will be prepared in conformance with the latest Caltrans CADD User's Manual and the Caltrans Drafting Manual to assure complete compatibility.

A. Services breakdown:

1. Project Administration

Project Development Team (PDT) meetings with the City's Project Manager, and other representatives from affected agencies will be held at least once a month and may be held on a bi-weekly basis. Consultant shall prepare meeting agendas and minutes for each meeting. The minutes shall be distributed within five (5) working days after the meeting to all attendees. The minutes shall include, but not be limited to, a list of attendees with phone numbers and email, a synopsis of discussion items, any pertinent information, action items, and all follow-ups to the action items.

Consultant shall monitor quality on all deliverables, calculations, and other work products. Consultant shall prepare a Quality Control Plan for use on this phase of the project and submit a copy to the City within thirty (30) calendar days of Notice-to-Proceed. This is not a separate task, but shall be included as part of Project Administration. Consultant shall attend meetings as required to complete the Project, including Caltrans Safety Review meeting, Design Review meetings, Constructability Review meetings, Quality meetings, and informational meetings with stakeholders. Provide the deliverables listed in other sections of the scope of work.

a. Budgeting

Consultant will prepare budgets for each task and milestone for the Project. Such budgets will be entered into the Consultant's Management Information System along with actual costs incurred and used as a basis for cost monitoring and control. Budget for the following items:

Meetings

1. Kickoff Meeting
2. Monthly progress conference calls and other project/progress meetings as needed

3. 50% Submittal
4. 90% Submittal
5. 100% Submittal
6. Pre-Construction
7. Council Meeting (if requested).

Deliverables

1. 30% Preliminary Design Submittal
2. 50% Submittal
3. 90% Submittal
4. 100% Submittal
5. Final Submittal
6. Record Drawings

Task 1 Deliverables

1. Meeting Agendas & Minutes (electronic)
2. Monthly Status Reports (electronic).
3. Monthly Updated Project Schedules (electronic)
4. Monthly Invoices.

b. Cost Accounting

Consultant will prepare monthly reports of expenditures for the Project by task and milestone. Expenditures include direct labor costs, other direct costs and sub-consultant costs. Reports will be included as supporting data for invoices presented to the City each month.

c. Scheduling

Consultant shall submit a detailed Project Schedule indicating milestones, major activities and deliverables to the City for review and comments within one (1) month from the Notice to Proceed (NTP). This schedule will reflect assumed review times necessary by all of the agencies involved. Review of the schedule will occur at subsequent trend meetings. Adjustments will be made, if necessary, due to changing circumstances. For proposal preparation purposes, allow four (4) weeks for the City's review of the first plan check and four (4) weeks for the subsequent checks. Plans submitted to the City that are incomplete shall be returned to Consultant unchecked and Consultant is expected to maintain the Project delivery schedule at no additional cost to the City. Consultant shall be familiar with Caltrans' plan check submittal procedures and timelines and shall schedule plan check submittals in order to maintain the Project schedule.

d. Quality Control Plan

The Plans, Specifications, and Estimate (PS&E) will be subject to quality control reviews before submittal. These reviews will assure conformance to Caltrans and

City standards and criteria as well as minimize typographical omissions. Consultant shall submit documentation of the completed QA/QC review.

e. **Progress Reporting**

Progress reports shall be prepared in accordance with City guidelines. Reports will be required monthly and shall be accompanied by an invoice.

f. **Contract Administration**

Consultant's Project Manager will maintain ongoing liaison with the City's Project Manager, agencies, and utility companies to promote effective coordination during the course of project development. Progress meetings with Consultant's staff, sub-consultants and City's Project Manager will be held regularly.

2 **Research Existing Conditions, Utility Survey and Mapping**

Research existing conditions and plans as necessary for the design of requested improvements. This Task includes, but is not necessarily limited to, the following items:

a. **Research**

Perform research of records including utilities, other agency records as necessary to secure information required to identify, locate, and accurately layout all existing utilities, improvements, easements, and rights-of-way within project limits that may interfere with the proposed improvements. The information to be researched will be, as a minimum, the following:

1. Review existing utility and street record drawing plans.
2. Review existing As-Built bridge drawing/inspection reports
3. Perform utility investigation/utility coordination and provide utility relocation recommendations, if necessary.
4. Perform an existing utility easement investigation (Prior Rights for proposed relocation).
5. Perform field investigation and measurement to assess existing site conditions.
6. Provide a copy of all utility notifications and responses prior to first progress payment request.

Consultant shall determine the ownership rights (utilities in their own easement or utilities in by City franchise agreement) of utilities affected by Project construction and shall coordinate and notify City if any costs are to be paid by the City for utility relocations early in the design process. Consultant shall track the progress/schedule of the utility company relocation plan preparation in order to have the utility facility relocated prior to construction (preferred) or to ensure final approved utility relocation plans are attached to the City's construction plans including the number of working days required by the Utility to construct their facilities clearly identified in the Special

Provisions. A utility matrix shall be prepared listing the facility type, construction material, location/depth and disposition of utilities within the Project limits.

b. Right of Way Engineering

Licensed land surveyors will perform right-of-way engineering, mapping, and field surveys required for this task. The project will require the acquisition of additional right-of-way, and the acquisition process shall be conducted in accordance with Caltrans Standards, California Civil Code, and the California Relocation Assistance law. Caltrans will review and approve all right-of-way-related work and deliverables.

c. Right-of-Way Requirements

Consultant shall determine right-of-way needs and prepare maps for submittal to Caltrans right-of-way. Consultant shall identify the need for new right-of-way, new access control, permanent easements, and temporary construction easements. Consultant shall coordinate with affected agencies to determine right-of-way impacts (including utility right of way needs). Caltrans shall approve right-of-way requirements prior to initiating preparation of right of way maps.

1. Right-of-Way Maps

Consultant shall prepare right-of-way base maps in accordance with Caltrans requirements. Base maps shall show existing features consisting of lots along Magnolia Avenue with all right of way and easement areas, assessor's parcel numbers, addresses, types of businesses, property lines, footprints of buildings, setback distances from right of way to buildings, vegetation, and improvements in the take areas and existing driveways.

Consultant shall identify all utilities, including those that have prior rights. Consultant shall prepare right-of-way maps at a scale approved by Caltrans reflecting all right-of-way for the project, including acquisitions and easements required for maintenance access, drainage, material sites, utilities, and construction work areas, as necessary. Consultant shall also show access control. Dimensions are to be shown in English units.

2. Appraisal Maps, Plats, and Descriptions

Consultant shall prepare legal descriptions, plats, deeds, and maps for each parcel acceptable to Caltrans and the City for conveyance of marketable title interests and for accurate representation of right-of-way necessary for construction of the project.

Consultant shall prepare legal descriptions, plats, and maps acceptable to utility companies (as required) and the City for conveyance of marketable title interests and accurate representation of easements necessary for construction of the project.

Consultant shall hire a licensed Appraiser to prepare appraisals as required by Caltrans. Consultant shall hire an experienced acquisition subconsultant to conduct right-of-way negotiations and coordinate with City representatives. Consultant shall prepare necessary Caltrans Local Assistance Paperwork associated with utility relocations and ROW acquisitions.

3. Title Reports

Consultant shall provide Title Reports to City.

d. Surveying

Provide topographic survey using City Standard North American Datum 1983 US Feet State Plan VI along the proposed street alignment from street right-of-way to right-of-way limits and the proposed new right-of-way limits curb returns at intersecting streets along alignment to include the following:

1. Provide one (1)-foot contours based on City of Corona vertical datum (NGVD 29).
2. Provide spot elevations at critical locations along the alignment to verify vertical control and check existing improvements and utilities that may need to be relocated due to the proposed improvements.
3. Survey flow-line elevations of existing storm drains, existing utilities that currently use the bridge for crossing the channel. The City has three utilities a Distribution Main, Collection main and a Traffic ATMS lines.
4. Show surface features and visible indications of existing utilities based on NAD 83 horizontal control to include curbs and gutters, sidewalks, and other elements relevant to prepare a comprehensive topographic map suitable for street improvement and bridge widening design and construction.
5. Establish street centerlines, right-of-way lines existing and proposed, and all easements from available record information.
6. Provide the basis-of-bearing and benchmark information used for the survey and necessary for construction.

e. Utility Locating/Potholing

This task involves the collection, assembly, and mapping of existing overhead and underground utility lines within the project limits. Perform necessary research to identify all existing utilities and potential conflicts. Pothole existing utilities to verify depth and location (assume 20 potholes). Provide all required traffic control and surface repair necessary for potholing work. Consultant shall:

1. Conduct Research;
2. Prepare Notification letters, the City will print the notification letters on City letterhead for the Consultant to mail;
3. Compile Utility Map of Records;
4. Complete Utility Surveys

5. Utility Potholes with plan view exhibit and pothole log
6. Complete Utility Pothole Surveys
7. Prepare to Relocate Notice/Final Utility Notice Form, The Consultant shall provide the City all necessary exhibits and drawings needed for coordination with the utility companies
8. Prepare Notice to Relocate, minimum 3 relocation letters required

Consultant shall determine the ownership rights (utilities in their own easement or utilities in by City franchise agreement) of utilities affected by project construction and shall coordinate and notify the City early in the design process if any costs are to be paid by the City for utility relocations. Consultant shall track the progress/schedule of the utility company relocation plan preparation in order to have the utility facility relocated prior to construction (preferred) or to ensure final approved utility relocation plans are attached to the City construction plans including the number of working days required by the Utility to construct their facilities clearly identified in the Special Provisions. Consultant shall prepare a utility matrix listing the facility type, construction material, location/depth and disposition of utilities within the project limits.

Deliverables

1. Summary of research findings: Technical Memorandum (1 draft paper and electronic copy and 1 final paper and electronic copy)

3. Preliminary Design

Consultant shall develop a preliminary design of the project site to review with City staff and obtain Caltrans approval. An approximate 30% design level will constitute a Preliminary Design for this project. Preliminary design will include, but is not limited to the following:

- a. Existing utilities
- b. Permitting requirements
- c. Traffic impacts
- d. Easement requirements i.e. temporary construction if required.
- e. Proposed alignment and typical cross sections
- f. Proposed connections
- g. Proposed structural design and calculations as requested by Caltrans and/or RCFC&WCD
- h. Proposed bridge widening and typical cross section.
- i. Preliminary construction cost estimate
- j. Schedule

Deliverables

- a. Draft Preliminary Design Report (PDR) (4 paper copies and an electronic copy)
- b. Final Preliminary Design Report (PDR) (4 paper copies and an electronic copy)
- c. Preliminary Design Report PDR Review Meeting Agenda and Minutes (2 paper copies and an electronic copy)
- d. Structural Calculations and design will be performed using Caltrans current standards and requirements. as requested by Caltrans and/or RCFC&WCD.

4. Final Engineering and Preparation of Construction Contract Documents

Final Engineering shall include detailed engineering calculations, design, construction plans, specifications and special provisions and engineer's construction cost estimate for the project that will enable the City to advertise and award the construction contract for the project. Components of this task include:

a. Required Permits

Consultant shall, on behalf of the City, identify, prepare applications for, and assist in obtaining the permits and clearances required by RCFC&WCD, Army Corps of Engineers, California Department of Fish and Game, Regional Water Quality Control Board, BNSF, and other public or private agencies/utilities or parties, for construction of the proposed facilities.

b. Easements

Consultant shall, on behalf of the City, prepare temporary construction access easements necessary for construction and per Caltrans requirements.

c. Plan and Technical Specification Preparations (50%, 90%, 100%, and Final)

Consultant will submit two (2) sets of 24-inch x 36-inch and two (2) sets of 11-inch x 17-inch plans on bond paper for each submittal. Consultant will submit four (4) sets of specifications (beginning with the 90% submittal). Paper submittals shall be accompanied by a CD with scanned images (PDF files) of submittals. The final submittal shall include one (1) set of 24-inch x 36-inch original signed/sealed plans on bond paper, one (1) set of signed/sealed final specifications, appendices, bid form, opinion of construction cost, and electronic files as described herein.

Work shall include completion of:

- 1. Title sheet.
- 2. Vicinity and location map.
- 3. Title block (City provided); north arrow; scales; project title; construction notes; construction legend; standard symbols; telephone numbers of utilities and other affected agencies and businesses, basis of bearing and bench mark, general notes and abbreviations.
- 4. Existing improvements, including but not limited to base map, property lines, curb & gutter, sidewalk, centerline, right of way, all utility lines (above and underground), valves, blow-offs, air release valves, water mains, drainage

facilities, field topographic survey/design survey, and physical features, fences, above-ground and below-ground improvements, trees and vegetation, striping and/or pavement markings, traffic loops and other details that are of benefit to and/or requested by the City.

5. Provide piping plan, profiles, sections and details. Buried piping plans shall be plotted at 1" =40' horizontal and 1" =4' vertical scales and show all pipeline appurtenances, including, but not limited to isolation valves, check valves, air/vac valves, blowoffs, and cathodic protection (when required). Provide casing detail.
6. Typical street section with underground utilities on both bridge approaches if different.
7. Typical bridge section with utilities and proposed utilities crossing shown.
8. Technical specifications and special provisions conforming to the Greenbook and the City of Corona Department of Public Works Modifications to Standard Specifications for Public Works Construction, latest edition and Caltrans Standard Specification and standards for the bridge portion of the design.
9. Construction details, detailed cost opinion and bid schedule. Reference City standard details in the plans for the street improvements and Caltrans standard details for the bridge, where applicable and any BNSF standard that applies to the at grade crossing.
10. Process plans with City staff for approval and make corrections as appropriate.
11. Consultant and City Project Teams to meet at regularly scheduled intervals for progress meetings. Consultant should plan on monthly progress meetings for the duration of the project, at a minimum.

Plans that are considered 50% complete shall contain items listed above in "1" thru "6". City will review and return 50% plans with comments pertaining to required improvements for the project. Consultant shall incorporate comments and include items listed above in "7" thru "11" in the 90% submittal. Plans and technical specifications submitted as 100% shall incorporate all comments, all required permits and other agency approvals. Consultant shall provide a digital copy of the approved project plans in AutoCAD version 2015 and PDF to the City on a compact disc.

d. Engineer's Construction Cost Opinion (90%, 100% and Final Document)

1. Engineer's construction cost opinion and quantity takeoff (in MS Excel format) for use by the City to advertise for bid.
2. Bid schedule/measurement and payment.
3. Estimated bidding/construction schedule.

e. Record Drawings

The construction contract will require the contractor to provide to the City for review and approval one set of as-built plans showing the design changes made

during the course of construction. Consultant shall prepare from these as-built plans and deliver to the City:

1. One set of 24-inch x 36-inch Mylar "Record Drawings" marked "As-Built", and
2. One compact disc (CD) with the record drawing files saved in AutoCAD version 2015 and PDF.

Deliverables

1. 50% Submittal: two (2) sets of 24-inch x 36-inch and two (2) sets of 11-inch x 17-inch plans on bond paper and 1 electronic.
2. 90% Submittal: Engineer's Construction Cost Opinion, two (2) sets of 24-inch x 36-inch and two (2) sets of 11-inch x 17-inch plans on bond paper, 4 specifications paper copies, and 1 electronic.
3. 90% Submittal: Engineer's Construction Cost Opinion, two (2) sets of 24-inch x 36-inch and two (2) sets of 11-inch x 17-inch plans on bond paper, 4 specifications paper copies, and 1 electronic.
4. 100% Submittal: Engineer's Construction Cost Opinion, two (2) sets of 24-inch x 36-inch and two (2) sets of 11-inch x 17-inch plans on bond paper, 4 specifications paper copies, 1 appendices paper copy, signed/sealed, and 1 electronic other agency approvals.
5. Final Submittal: Engineer's Construction Cost Opinion, 1 signed/sealed plan set paper copy, 1 signed/sealed specifications paper copy, 1 bid form and cost opinion, and 1 electronic.

5. Bidding Services

a. Bidding Phase Support

Consultant shall assist City in providing clarification and prepare information to be used in addenda as needed for ten (10) questions that may arise during the bidding process. City will prepare and make available to plan holders any required addenda. Attend the pre-bid meeting, and assist the City with bid evaluations and recommendation of bid award.

b. Conformed Plans and Specifications

Consultant shall prepare conformed plans and specifications for use in constructing the project. The conformed plans and specifications shall reflect changes made during bidding and will be noted as a revision to the final design plans.

6. Engineering Construction Services

Consultant shall assist the City during the construction of the project by performing the items below:

a. Engineering Support

1. Provide professional engineering services to address and respond to up to twenty (20) Requests for Information (RFI's) from the contractor.
2. Review up to ten (10) shop drawing and materials submittals.
3. Prepare supplementary sketches and details as required to resolve field construction problems that may be encountered.
4. Review and provide recommendations regarding proposed change orders, as needed.
5. Attend pre-construction meeting and up to three (3) additional office or construction site meetings during construction.

b. Minor Plan Revisions

Budget 28 hours of staff time for minor plan revisions.

c. Preparation of Record Documents (As-Built)

The construction contract will require the contractor to provide to the City for review and approval one set of as-built plans showing the design changes made during the course of construction.

Consultant shall prepare record drawings from contractor and construction inspector as-built drawings, markups, and field notes. Submit the following:

1. One (1) set of 24-inch x 36-inch mylar "Record Drawings"
2. One (1) CD (or DVD) with the record drawing files saved in AutoCAD 2015 .dwg and PDF formats.

6. Optional Services

- a. Construction Staking

EXHIBIT "B" **SCHEDULE OF SERVICES**

ID	WBS	Task Name	Duration	Start	Finish	2019	2020
1		City Council Approval	1 d	Fri 7/19/19	Fri 7/19/19	7	
2		Contract Execution and Notice to Proceed	10 d	Mon 7/22/19	Fri 8/2/19	7	
3		Phase I: Project Approval and Environmental Documentation (PA&ED)	0 d	Mon 8/5/19	Mon 8/5/19	8	
4		Team Mobilization (prime and sub-contract execution and staff mobilization)	10 d	Mon 8/5/19	Fri 8/16/19	8	
5		Task 1 Project Management					
6	1.1	Project Administration	395 d	Mon 8/5/19	Fri 2/5/21	8	2021
7		Task 2 Planning and Project Development					
8	2.1	Data Collection and Site Reconnaissance	10 d	Mon 8/19/19	Fri 8/30/19	8	
9	2.2	Rights of Entry, Surveys and Aerial Topographic Mapping	45 d	Mon 9/2/19	Fri 11/1/19	9	
10	2.3	Utility Research and Base Mapping	45 d	Mon 9/2/19	Fri 11/1/19	9	
11	2.4	Traffic Study	45 d	Mon 9/2/19	Fri 11/1/19	9	
12	2.5	Preliminary Railroad Coordination	135 d	Mon 9/2/19	Fri 3/6/20	9	2020
13		Task 3 Preliminary Engineering Design (30% Design Level)					
14	3.1	Preliminary Bridge Foundation Reports	45 d	Mon 9/2/19	Fri 11/1/19	9	
15	3.2	Roadway Study and Geometric Approval Drawings	45 d	Mon 11/4/19	Fri 1/3/20	11	
16	3.3	Preliminary Roadway Drainage Study	25 d	Mon 12/2/19	Fri 1/3/20	12	
17	3.4	Floodplain and Bridge Hydraulic Study	25 d	Mon 1/6/20	Fri 2/7/20	1	
18	3.5	Bridge Type Selection Study	45 d	Mon 2/10/20	Fri 4/10/20	2	
19	3.6	Preliminary Right-of-Way Cost Estimates	15 d	Mon 1/6/20	Fri 1/24/20	1	
20	3.7	Grade Crossing Improvement Plan	15 d	Mon 1/6/20	Fri 1/24/20	1	
21		Preliminary Design Review	25 d	Mon 4/13/20	Fri 5/15/20	4	2020
22		Task 4 Environmental Documentation					
23	4.1	Preliminary Environmental Study (PES)	45 d	Mon 9/2/19	Fri 11/1/19	9	
24		Caltrans Review, Resubmittal and Approval	70 d	Mon 11/4/19	Fri 2/7/20	11	
25	4.2	Air Quality Study	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
26	4.3	Hazardous Materials	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
27	4.4	Water Quality Assessment	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
28	4.5	Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER)	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
29	4.6	Noise Study	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
30	4.7	Biological Study (Natural Environmental Study, Minimal Impact)	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
31	4.8	Wetland Delineation and Assessment	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
32	4.9	Visual Resources Technical Memorandum	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
33	4.10	Community Impact Technical Memorandum	90 d	Mon 2/10/20	Fri 6/12/20	2	2020
34	4.11	Cultural Resources Study	120 d	Mon 2/10/20	Fri 7/24/20	2	2020
35	4.12	NEPA CE Coordination	30 d	Mon 7/27/20	Fri 9/4/20	7	2020
36	4.13	Draft CEQA IS/MND	55 d	Mon 7/27/20	Fri 10/9/20	7	2020
37	4.14	Circulate Draft IS/MND and Respond Comments	45 d	Mon 10/12/20	Fri 12/11/20	10	2020
38	4.15	Final IS/MND	30 d	Mon 12/14/20	Fri 1/22/21	12	2021
39	4.16	Adopt IS/MND and File Notice of Determination	10 d	Mon 1/25/21	Fri 2/5/21	1	2021
40		Obtain E-76 Before Proceeding with PS&E	60 d	Mon 2/8/21	Fri 4/30/21	2	2021
41		10 Begin PS&E. See Sheet 2	1 d	Mon 5/3/21	Mon 5/3/21	5	2021

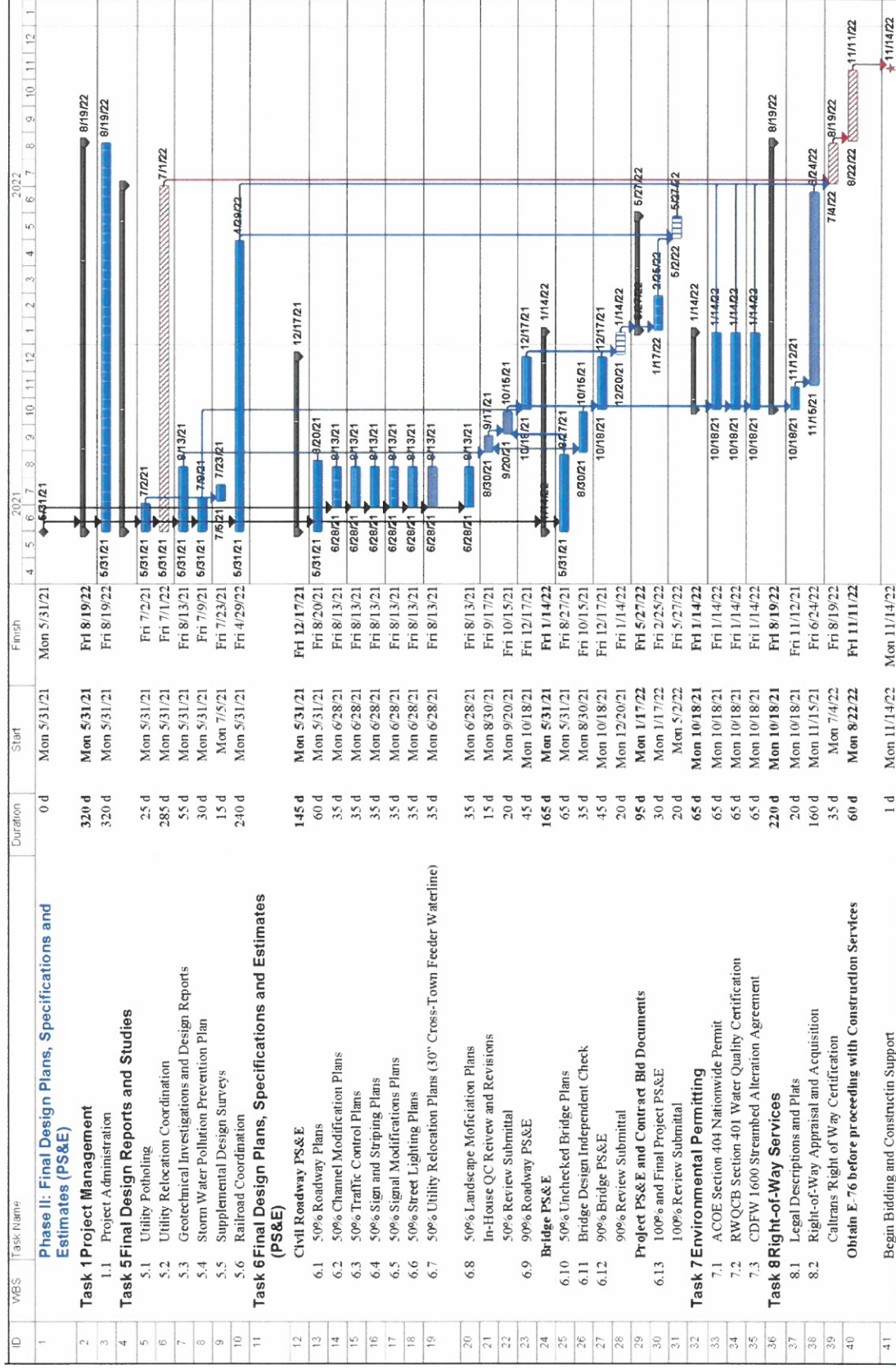


EXHIBIT "C" COMPENSATION

Total Compensation shall not exceed one million one hundred sixty-seven thousand eighty three dollars and forty-nine cents (\$1,167,083.49) without written authorization from City's Representative.

Task No.	Task Description	Task Cost
Phase I: Project Approval and Environmental Documentation (PA&ED)		
Task 1	Project Management	
1.1	Project Administration	\$ 42,822.32
Task 2	Planning and Project Development	
2.1	Data Collection and Site Reconnaissance	\$ 23,956.22
2.2	Surveys and Aerial Topographic Mapping	\$ 25,206.20
2.3	Utility Research and Base Mapping	\$ 9,129.28
2.4	Traffic Study	\$ 17,286.65
2.5	Preliminary Railroad Coordination	\$ 3,097.51
Task 3	Preliminary Engineering Design (30% Design Level)	
3.1	Preliminary Geotechnical Reports	\$ 15,293.06
3.2	Roadway Study and Geometric Approval Drawings	\$ 47,435.73
3.3	Preliminary Roadway Drainage Study	\$ 4,853.68
3.4	Floodplain and Bridge Hydraulic Study	\$ 7,777.22
3.5	Bridge Type Selection Study	\$ 45,119.81
3.6	Preliminary Right-of-Way Cost Estimates	\$ 12,646.33
3.7	Grade Crossing Improvement Plan	\$ 3,785.50
Task 4	Environmental Documentation	
4.1	Preliminary Environmental Study (PES)	\$ 5,828.64
4.2	Air Quality Study	\$ 21,115.00
4.3	Hazardous Materials	\$ 28,933.95
4.4	Water Quality Assessment	\$ 5,961.21
4.5	Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER)	\$ 7,161.41
4.6	Noise Report	\$ 26,677.00
4.7	Biological Study (Natural Environmental Study, Minimal Impact)	\$ 886.64
4.8	Jurisdictional Waters and Wetland Delineation and Assessment	\$ 886.64
4.9	Visual Resources Technical Memorandum	\$ 266.26
4.10	Community Impact Technical Memorandum	\$ 2,662.58
4.11	Cultural Resources Study	\$ 16,219.42
4.12	NEPA CE Coordination	\$ 1,362.12
4.13	Draft CEQA IS/MND	\$ 6,810.60
4.14	Circulate Draft IS/MND	\$ 1,065.03
4.15	Respond Comments and Prepare Final IS/MND	\$ 1,362.12
4.16	Adopt IS/MND and File Notice of Determination	\$ 1,454.61
Phase II: Final Design Plans, Specifications and Estimates (PS&E)		
Task 1	Project Management	
1.1	Project Administration	\$ 33,388.29
Task 5	Final Design Reports and Studies	
5.1	Utility Potholing	\$ 26,058.99
5.2	Utility Relocation Coordination	\$ 30,171.23

Task No.	Task Description	Task Cost
5.3	Geotechnical Investigations and Design Reports	\$ 57,860.69
5.4	Storm Water Pollution Prevention Plan	\$ 5,889.98
5.5	Supplemental Design Surveys	\$ 1,647.09
5.6	Railroad Coordination	\$ 4,388.87
Task 6	Final Design Plans, Specifications and Estimates (PS&E)	
Civil Roadway PS&E		
6.1	50% Roadway Plans	\$ 41,238.24
6.2	50% Channel Modification Plans	\$ 9,932.54
6.3	50% Traffic Control Plans	\$ 26,654.49
6.4	50% Sign and Striping Plans	\$ 20,930.61
6.5	50% Signal Modifications Plans	\$ 15,556.10
6.6	50% Street Lighting Plans	\$ 4,033.36
6.7	50% Utility Relocation Plans (30" Cross-Town Feeder Waterline)	\$ 10,915.31
6.8	50% Landscape Modification Plans	\$ 13,099.77
6.9	90% Roadway PS&E	\$ 63,868.95
Bridge PS&E		
6.10	50% Unchecked Bridge Plans	\$ 68,680.47
6.11	Bridge Design Independent Check	\$ 26,013.76
6.12	90% Bridge PS&E	\$ 22,791.79
Project PS&E and Contract Bid Documents		
6.13	100% and Final Project PS&E	\$ 59,658.31
Task 7	Environmental Permitting	
7.1	ACOE Section 404 Nationwide Permit	\$ 1,619.86
7.2	RWQCB Section 401 Water Quality Certification	\$ 1,619.86
7.3	CDFW 1600 Streambed Alteration Agreement	\$ 1,619.86
Task 8	Right-of-Way Services	
8.1	Legal Descriptions and Plats	\$ 6,919.66
8.2	Right-of-Way Appraisal and Acquisition	\$ 132,680.30
Phase III: Bidding and Construction Supports		
9.1	Bidding Support	\$ 11,597.38
9.2	Engineering Construction Support	\$ 42,153.58
9.3	Prepare As-built Plans	\$ 11,954.42
9.4	Construction Staking	\$ 11,859.02
Total Labor Cost		\$ 1,151,865.49
Total Other Direct Cost (ODC) excluding printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services		\$ 15,218.00
Total Contract Amount		\$ 1,167,083.49

Breakdown of Costs in Phases	
Phase I: Project Approval and Environmental Documentation (PA&ED) & ODC	\$ 402,280.71
Phase II: Final Design Plans, Specifications and Estimates (PS&E)	\$ 547,638.41
Right-of-Way Appraisal and Acquisition Services	\$ 139,599.95
Phase III: Bidding and Construction Supports	\$ 77,564.40

Note: Mark-ups are Not Allowed.

☒ Prime Consultant ☐ Sub Consultant ☐ 2nd Tier Sub Consultant

Consultant: CNS Engineers, Inc.

Project Name: Magnolia Avenue Bridge Widening from El Camino Avenue to 1,000 Feet East of All American Way

FPN: STPL-5104(046)

City Project No. 2015-15

Date: 4/22/2019

DIRECT LABOR

Classification/Title	Name	Hours	Actually Hourly Rate	Total
Principal Bridge Engineer / PIC	James Lu	117	\$ 89.50	\$ 10,471.50
Project/Roadway Manager *	Steve Hosford	892	\$ 59.50	\$ 53,074.00
Design Engineer	Nancy Li	970	\$ 38.50	\$ 37,345.00
Project Controller	Lily Huang	29	\$ 58.50	\$ 1,696.50
Senior Bridge Engineer	Quyet Nguyen	253	\$ 60.50	\$ 15,306.50
Bridge Design Engineer	Justin Nguyen	196	\$ 43.50	\$ 8,526.00
Assistant Design Engineer	Basit Qayyum	600	\$ 34.75	\$ 20,850.00
			\$ -	\$ -

* Key Personnel, *** Employees subject to prevailing wages

LABOR COSTS

a) Subtotal Direct Labor Costs	\$ 147,269.50	
b) Anticipated Salary Increases (see Page 2 for calculation)	\$ 7,191.17	4.883%
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$ 154,460.67	

INDIRECT COSTS

d) Fringe Benefit (Rate: <u>55.18%</u>)	e) Total Fringe Benefits [(c) x (d)]	\$ 85,231.40
f) Overhead (Rate: <u>109.28%</u>)	g) Overhead [(c) x (f)]	\$ 168,794.62
h) General and Administrative (Rate: <u>164.46%</u>)	i) Gen & Admin [(c) x (h)]	\$ -
Total OH Rate: <u>164.46%</u> (FY 2016)	j) TOTAL INDIRECT COSTS [(e) + (g) + (i)]	\$ 254,026.02

FIXED FEE

l) (Rate: <u>10%</u>)	k) TOTAL FIXED FEE [(c) + (j)] x (l)	\$ 40,848.67
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OTHER DIRECT COSTS (ODC)

(ODC is actual cost to be reimbursed with supporting documentation.)

m) All encroachment permit fees are to be paid by the City directly.	\$ -
n)	\$ -
o) Printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services are not allowed by the City.	\$ -
p)	\$ -
q)	\$ -

r) TOTAL OTHER DIRECT COSTS [(m) + (n) + (o) + (p) + (q)] \$ -

Total Prime Consultant's Cost \$ 449,335.36

SUBCONSULTANTS' COSTS

Aguilar Consulting Inc. - Drainage & WQ Engineering and Roadway Plans	\$ 115,815.94
Converse Consultants - Geotechnical Eng and Hazardous Waste Studies	\$ 117,305.70
Community Works Design Group - Landscape Architecture	\$ 31,870.78
Engineering Resources of Southern California - Waterline Design	\$ 52,558.37
Jericho Systems - Environmental	\$ 92,787.50
JMDiaz - Railroad Coordination	\$ 20,506.03
KOA Corp - Traffic	\$ 44,445.47
LDDC - Survey	\$ 40,029.98
Overland, Pacific and Cutler - Utilities and Right of Way	\$ 202,428.35
s) TOTAL SUBCONSULTANTS' COSTS	\$ 717,748.13

TOTAL COST [(c) + (j) + (k) + (r) + (s)]

\$ 1,167,083.49

Task No.	Task Description	Principal Bridge Engineer / PIC	Project Ready Manager *	Design Engineer	Project Controller	Senior Bridge Engineer	Bridge Design Engineer	Assistant Design Engineer	Total Hours	Labor Cost	Subconsultants Labor Cost	Subtotal Labor Cost
Phase I: Project Approval and Environmental Documentation (PA&ED)												
Task 1 Project Management												
1.1	Project Administration	28	180		14				224	\$ 42,822.32	\$ -	\$ 42,822.32
Task 2 Planning and Project Development												
2.1	Data Collection and Site Reconnaissance		8	8					16	\$ 2,392.07	\$ 21,564.15	\$ 23,956.22
2.2	Surveys and Aerial Topographic Mapping								0	\$ -	\$ 25,206.20	\$ 25,206.20
2.3	Utility Research and Base Mapping		16	24					40	\$ 5,725.88	\$ 3,405.40	\$ 9,129.28
2.4	Traffic Study								0	\$ -	\$ 17,286.65	\$ 17,286.65
2.5	Preliminary Railroad Coordination								0	\$ -	\$ 3,097.51	\$ 3,097.51
Task 3 Preliminary Engineering Design (30% Design Level)												
3.1	Preliminary Geotechnical Reports								0	\$ -	\$ 15,293.06	\$ 15,293.06
3.2	Roadway Study and Geometric Approval Drawings		96	150					246	\$ 35,048.09	\$ 12,387.64	\$ 47,435.73
3.3	Preliminary Roadway Drainage Study								0	\$ -	\$ 4,853.68	\$ 4,853.68
3.4	Floodplain and Bridge Hydraulic Study								0	\$ -	\$ 7,777.22	\$ 7,777.22
3.5	Bridge Type Selection Study	16		36		60			352	\$ 45,119.81	\$ -	\$ 45,119.81
3.6	Preliminary Right-of-Way Cost Estimates								0	\$ -	\$ 12,646.33	\$ 12,646.33
3.7	Grade Crossing Improvement Plan								0	\$ -	\$ 3,785.50	\$ 3,785.50
Task 4 Environmental Documentation												
4.1	Preliminary Environmental Study (PES)								0	\$ -	\$ 5,828.64	\$ 5,828.64
4.2	Air Quality Study								0	\$ -	\$ 21,115.00	\$ 21,115.00
4.3	Hazardous Materials								0	\$ -	\$ 28,933.95	\$ 28,933.95
4.4	Water Quality Assessment								0	\$ -	\$ 5,961.21	\$ 5,961.21
4.5	Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER)								0	\$ -	\$ 7,161.41	\$ 7,161.41
4.6	Noise Report								0	\$ -	\$ 26,677.00	\$ 26,677.00
4.7	Biological Study (Natural Environmental Study, Minimal Impact)								0	\$ -	\$ 886.64	\$ 886.64
4.8	Jurisdictional Waters and Wetland Delineation and Assessment								0	\$ -	\$ 886.64	\$ 886.64
4.9	Visual Resources Technical Memorandum								0	\$ -	\$ 266.26	\$ 266.26
4.10	Community Impact Technical Memorandum								0	\$ -	\$ 2,662.58	\$ 2,662.58
4.11	Cultural Resources Study								0	\$ -	\$ 16,219.42	\$ 16,219.42
4.12	NEPA CE Coordination								0	\$ -	\$ 1,362.12	\$ 1,362.12
4.13	Draft CEQA IS/MND								0	\$ -	\$ 6,810.60	\$ 6,810.60
4.14	Circulate Draft IS/MND								0	\$ -	\$ 1,065.03	\$ 1,065.03
4.15	Respond Comments and Prepare Final IS/MND								0	\$ -	\$ 1,362.12	\$ 1,362.12
4.16	Adopt IS/MND and File Notice of Determination								0	\$ -	\$ 1,454.61	\$ 1,454.61
Phase II: Final Design Plans, Specifications and Estimates (PS&E)												
Task 1 Project Management												
1.1	Project Administration	20	144		10				174	\$ 33,388.29	\$ -	\$ 33,388.29
Task 5 Final Design Reports and Studies												
5.1	Utility Pathology		12	4					16	\$ 2,648.36	\$ 23,410.63	\$ 26,058.99
5.2	Utility Relocation Coordination								24	\$ 4,356.98	\$ 25,814.24	\$ 30,171.23
5.3	Geotechnical Investigations and Design Reports		24						0	\$ -	\$ 57,860.69	\$ 57,860.69
5.4	Storm Water Pollution Prevention Plan								0	\$ -	\$ 5,889.98	\$ 5,889.98
5.5	Supplemental Design Surveys								0	\$ -	\$ 1,647.09	\$ 1,647.09

Task No.	Task Description	Principal Bridge Engineer / P/E	Project/Industry Manager	Design Engineer	Project Controller	Senior Bridge Engineer	Bridge Design Engineer	Assistant Design Engineer	Total Hours	Labor Cost	Subconsultants Labor Cost	Subtotal Labor Cost
5.6	Railroad Coordination	\$273.07	\$181.54	\$117.47	\$178.49	\$184.59	\$132.72	\$106.03	0	\$ -	\$ 4,388.87	\$ 4,388.87
Task 6	Final Design Plans, Specifications and Estimates (PS&E)											
Civil Roadway PS&E												
6.1	50% Roadway Plans		44						44	\$ 7,987.80	\$ 33,250.44	\$ 41,238.24
6.2	50% Channel Modification Plans								0	\$ -	\$ 9,932.54	\$ 9,932.54
6.3	50% Traffic Control Plans		64	128					192	\$ 26,654.49	\$ -	\$ 26,654.49
6.4	50% Sign and Striping Plans		48	104					152	\$ 20,930.61	\$ -	\$ 20,930.61
6.5	50% Signal Modifications Plans								0	\$ -	\$ 15,556.10	\$ 15,556.10
6.6	50% Street Lighting Plans								0	\$ -	\$ 4,033.36	\$ 4,033.36
6.7	50% Utility Relocation Plans (30" Cross-Town Feeder								0	\$ -	\$ 10,915.31	\$ 10,915.31
6.8	50% Landscape Modification Plans								0	\$ -	\$ 13,099.77	\$ 13,099.77
6.9	90% Roadway PS&E		108	116					224	\$ 33,232.68	\$ 30,636.27	\$ 63,868.95
Bridge PS&E												
6.10	50% Unchecked Bridge Plans	16		180		96			532	\$ 68,680.47	\$ -	\$ 68,680.47
6.11	Bridge Design Independent Check						196		196	\$ 26,013.76	\$ -	\$ 26,013.76
6.12	90% Bridge PS&E	16		56		32			160	\$ 22,791.79	\$ -	\$ 22,791.79
Project PS&E and Contract Bid Documents												
6.13	100% and Final Project PS&E	16	48	96		24			216	\$ 32,183.10	\$ 27,475.21	\$ 59,658.31
Task 7 Environmental Permitting												
7.1	ACOE Section 404 Nationwide Permit								0	\$ -	\$ 1,619.86	\$ 1,619.86
7.2	RWQCB Section 401 Water Quality Certification								0	\$ -	\$ 1,619.86	\$ 1,619.86
7.3	CDFW 1600 Streambed Alteration Agreement								0	\$ -	\$ 1,619.86	\$ 1,619.86
Task 8 Right-of-Way Services												
8.1	Legal Descriptions and Plats								0	\$ -	\$ 6,919.66	\$ 6,919.66
8.2	Right-of-Way Appraisal and Acquisition								0	\$ -	\$ 132,680.30	\$ 132,680.30
Phase III: Bidding and Construction Supports												
9.1	Bidding Support	1	24	12		4			41	\$ 6,778.04	\$ 4,819.34	\$ 11,597.38
9.2	Engineering Construction Support	4	64	28	5	32			165	\$ 26,192.25	\$ 15,961.33	\$ 42,153.58
9.3	Prepare As-built Plans		12	28		5			45	\$ 6,390.55	\$ 5,563.88	\$ 11,954.42
9.4	Construction Staking								0	\$ -	\$ 11,859.02	\$ 11,859.02
Total Hours											Total Labor Cost	\$ 1,151,865.49
											Subtotal ODC	\$ 15,218.00
											Total Cost w/ ODC	\$ 1,167,083.49