PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement") is dated October 4, 2016 ("Effective Date") and is between the City of Manhattan Beach, a California municipal corporation ("City") and Iteris, Inc., a Delaware corporation ("Contractor"). City and Contractor are sometimes referred to herein as the "Parties", and individually as a "Party".

RECITALS

A. City issued Request for Proposals No. 1075-16 on June 11, 2016, seeking proposals for the provision of traffic and civil engineering services.

B. Contractor submitted a proposal dated July 11, 2016 in response to the RFP. Per City's request, the Scope of Services and budget were revised in Iteris' Addendum dated August 3, 2016.

C. City desires to utilize the services of Contractor as an independent contractor to provide engineering services for the Downtown Traffic Signal Pole Replacement Project and City-Wide Traffic Signal Inventory/Condition Assessment/Design Project.

D. Contractor represents that it is fully qualified to perform such services by virtue of its experience and the training, education and expertise of its principals and employees.

E. City desires to retain Contractor and Contractor desires to serve City to perform these services in accordance with the terms and conditions of this Agreement.

The Parties therefore agree as follows:

1. Contractor's Services.

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A. <u>Scope of Services</u>. Contractor shall perform the services described in the Scope of Services (the "Services"), attached as **Exhibit A**. City may request, in writing, changes in the Scope of Services to be performed. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

B. <u>Party Representatives</u>. For the purposes of this Agreement, the City Representative shall be the City Manager, or such other person designated in writing by the City Manager (the "City Representative"). For the purposes of this Agreement, the Contractor Representative shall be Paul Frislie, Project Manager (the "Contractor Representative"). The Contractor Representative shall directly manage Contractor's Services under this Agreement. Contractor shall not change the Contractor Representative without City's prior written consent.

C. <u>Time for Performance</u>. Contractor shall commence the Services on the Effective Date and shall perform all Services in conformance with the project timeline, set forth in **Exhibit A**.

D. <u>Standard of Performance</u>. Contractor shall perform all Services under this Agreement in accordance with the standard of care generally exercised by like professionals under similar circumstances and in a manner reasonably satisfactory to City.

E. <u>Personnel</u>. Contractor has, or will secure at its own expense, all personnel required to perform the Services required under this Agreement. All of the Services required under this Agreement shall be performed by Contractor or under its supervision, and all personnel engaged in the work shall be qualified to perform such Services.

F. <u>Compliance with Laws</u>. Contractor shall comply with all applicable federal, state and local laws, ordinances, codes, regulations and requirements.

G. <u>Permits and Licenses</u>. Contractor shall obtain and maintain during the Agreement term all necessary licenses, permits and certificates required by law for the provision of Services under this Agreement, including a business license.

2. Term of Agreement. The term of this Agreement shall be from the Effective Date through March 20, 2017, unless sooner terminated as provided in Section 12 of this Agreement or extended.

3. Compensation.

A. <u>Compensation</u>. As full compensation for Services satisfactorily rendered, City shall pay Contractor at the hourly rates set forth in the Approved Fee Schedule attached hereto as Exhibit B. In no event shall Contractor be paid more than \$89,910 (the "Maximum Compensation").

B. <u>Expenses</u>. City shall only reimburse Contractor for those expenses expressly set forth in Exhibit B.

C. <u>Additional Services</u>. City shall not allow any claims for additional Services performed by Contractor, unless the City Council or City Representative, if applicable, and the Contractor Representative authorize the additional Services in writing prior to Contractor's performance of the additional Services or incurrence of additional expenses. Any additional Services or expenses authorized by the City Council or City Representative shall be compensated at the rates set forth in Exhibit B, or, if not specified, at a rate mutually agreed to by the Parties. City shall make payment for additional Services and expenses in accordance with Section 4 of this Agreement.

4. Method of Payment.

A. <u>Invoices</u>. Contractor shall submit to City an invoice, on a monthly basis for the Services performed pursuant to this Agreement. Each invoice shall itemize the Services rendered during the billing period, hourly rates charged, if applicable, and the amount due. City shall review each invoice and notify Contractor in writing within ten business days of receipt of any disputed invoice amounts.

B. <u>Payment</u>. City shall pay all undisputed invoice amounts within 30 calendar days after receipt up to the maximum compensation set forth in Section 3 of this Agreement. City does not pay interest on past due amounts. City shall not withhold federal payroll, state payroll or other taxes, or other similar deductions, from payments made to Contractor.

C. <u>Audit of Records</u>. Contractor shall make all records, invoices, time cards, cost control sheets and other records maintained by Contractor in connection with this Agreement available during Contractor's regular working hours to City for review and audit by City.

5. Independent Contractor. Contractor is, and shall at all times remain as to City, a wholly independent contractor. Contractor shall have no power to incur any debt, obligation, or liability on behalf of City. Neither City nor any of its agents shall have control over the conduct of Contractor or any of Contractor's employees, except as set forth in this Agreement. Contractor shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of City.

6. Information and Documents.

A. Contractor covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Contractor or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Contractor without prior written authorization by City. City shall grant such authorization if applicable law requires disclosure. Contractor, its officers, employees, agents, or subcontractors shall not without written authorization from the City Manager or unless requested in writing by the City Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary," provided Contractor gives City notice of such court order or subpoena.

B. Contractor shall promptly notify City should Contractor, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City. City may, but has no obligation to, represent Contractor or be present at any deposition, hearing or similar proceeding. Contractor agrees to cooperate fully with City and to provide City with the opportunity to review any

response to discovery requests provided by Contractor. However, City's right to review any such response does not imply or mean the right by City to control, direct or rewrite the response.

C. All Data required to be furnished to City in connection with this Agreement shall become City's property, and City may use all or any portion of the Data submitted by Contractor as City deems appropriate. Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files containing data generated for the Services, surveys, notes, and other documents prepared in the course of providing the Services shall become City's sole property and may be used, reused or otherwise disposed of by City without Contractor's permission. Contractor may take and retain copies of the written products as desired, but the written products shall not be the subject of a copyright application by Contractor.

D. Contractor's covenants under this Section 6 shall survive the expiration or termination of this Agreement.

7. Conflicts of Interest. Contractor and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Contractor's Services under this Agreement, including the Political Reform Act (Gov. Code § 81000, *et seq.*) and Government Code Section 1090. During the term of this Agreement, Contractor may perform similar Services for other clients, but Contractor and its officers, employees, associates and subcontractors shall not, without the City Representative's prior written approval, perform work for another person or entity for whom Contractor is not currently performing work that would require Contractor or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Contractor shall incorporate a clause substantially similar to this Section 7 into any subcontract that Contractor executes in connection with the performance of this Agreement.

8. Indemnification.

A. <u>Indemnity for Design Professional Services</u>. To the fullest extent permitted by law, Contractor shall, at its sole cost and expense, protect, indemnify, and hold harmless City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith, and reimbursement of attorney's fees and costs of defense (collectively "Liabilities"), whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of Contractor, its officers, agents, servants, employees, subcontractors, material men, contractors or their officers, agents, servants or

employees (or any entity or individual that Contractor shall bear the legal liability thereof) in the performance of design professional services under this Agreement by a "design professional," as the term is defined under California Civil Code Section 2782.8(c)(2).

B. <u>Other Indemnities</u>.

Other than in the performance of design professional services, and 1) to the fullest extent permitted by law, Contractor shall, at its sole cost and expense, defend, hold harmless and indemnify the Indemnitees from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Claims"), in law or equity. whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Contractor, its officers, agents, servants, employees, subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Claims arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. Contractor shall defend the Indemnitees in any action or actions filed in connection with any Claim with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Contractor shall reimburse the Indemnitees for any and all legal expenses and costs incurred by the Indemnitees in connection therewith.

2) Contractor shall pay all required taxes on amounts paid to Contractor under this Agreement, and indemnify and hold City harmless from any and all taxes, assessments, penalties, and interest asserted against City by reason of the independent contractor relationship created by this Agreement. Contractor shall fully comply with the workers' compensation law regarding Contractor and Contractor's employees. Contractor shall indemnify and hold City harmless from any failure of Contractor to comply with applicable workers' compensation laws. City may offset against the amount of any fees due to Contractor under this Agreement any amount due to City from Contractor as a result of Contractor's failure to promptly pay to City any reimbursement or indemnification arising under this subparagraph B.2).

3) Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 8 from each and every subcontractor or any other person or entity involved by, for, with or on behalf of Contractor in the performance of this Agreement. If Contractor fails to obtain such indemnities, Contractor shall be fully responsible and indemnify, hold harmless and defend the Indemnitees from and against any and all Claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Contractor's subcontractor, its officers, agents, servants,

employees, subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor's subcontractor shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Claims arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties.

C. <u>Workers' Compensation Acts not Limiting</u>. Contractor's obligations under this Section 8, or any other provision of this Agreement, shall not be limited by the provisions of any workers' compensation act or similar act. Contractor expressly waives its statutory immunity under such statutes or laws as to City, its officers, agents, employees and volunteers.

D. <u>Insurance Requirements not Limiting</u>. City does not, and shall not, waive any rights that it may possess against Contractor because of the acceptance by City, or the deposit with City, of any insurance policy or certificate required pursuant to this Agreement. The hold harmless and indemnification provisions in this Section 8 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, Claims, tax, assessment, penalty or interest asserted against City.

E. <u>Survival of Terms</u>. The indemnification in this Section 8 shall survive the expiration or termination of this Agreement.

9. Insurance.

A. <u>Minimum Scope and Limits of Insurance</u>. Contractor shall procure and at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

1) Commercial General Liability Insurance with a minimum limit of \$2,000,000.00 per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of \$2,000,000.00 per project or location. If Contractor is a limited liability company, the commercial general liability coverage shall be amended so that Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

2) Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of this Agreement with a combined single limit of \$2,000,000.00 per accident for bodily injury and property damage. If Contractor does not use any owned, non-owned or hired vehicles in the performance of Services under this Agreement, Contractor shall obtain a non-owned auto endorsement to the Commercial General Liability policy required under subparagraph A.1) of this Section 9.

3) Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of \$1,000,000.00 per accident for bodily injury or disease. If Contractor has no employees while performing

Services under this Agreement, workers' compensation policy is not required, but Contractor shall execute a declaration that it has no employees.

4) Errors and Omissions Insurance with minimum limits of \$2,000,000.00 per claim and in aggregate.

B. <u>Acceptability of Insurers</u>. The insurance policies required under this Section 9 shall be issued by an insurer admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self-insurance shall not be considered to comply with the insurance requirements under this Section 9.

C. <u>Additional Insured</u>. The commercial general and automobile liability policies shall contain an endorsement naming City, its officers, employees, agents and volunteers as additional insureds.

D. <u>Primary and Non-Contributing</u>. The insurance policies required under this Section 9 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to City. Any insurance or self-insurance maintained by City, its officers, employees, agents or volunteers, shall be in excess of Contractor's insurance and shall not contribute with it.

E. <u>Contractor's Waiver of Subrogation</u>. The insurance policies required under this Section 9 shall not prohibit Contractor and Contractor's employees, agents or subcontractors from waiving the right of subrogation prior to a loss. Contractor hereby waives all rights of subrogation against City.

F. <u>Deductibles and Self-Insured Retentions</u>. Any deductibles or self-insured retentions must be declared to and approved by City. At City's option, Contractor shall either reduce or eliminate the deductibles or self-insured retentions with respect to City, or Contractor shall procure a bond guaranteeing payment of losses and expenses.

G. <u>Cancellations or Modifications to Coverage</u>. Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 9 during the term of this Agreement. The commercial general and automobile liability policies required under this Agreement shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to City. If any insurance policy required under this Section 9 is canceled or reduced in coverage or limits, Contractor shall, within two business days of notice from the insurer, phone, fax or notify City via certified mail, return receipt requested, of the cancellation of or changes to the policy.

H. <u>City Remedy for Noncompliance</u>. If Contractor does not maintain the policies of insurance required under this Section 9 in full force and effect during the term of this Agreement, or in the event any of Contractor's policies do not comply with the requirements under this Section 9, City may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, City may, but has no duty to, take out the necessary insurance and pay, at Contractor's expense, the premium

thereon. Contractor shall promptly reimburse City for any premium paid by City or City may withhold amounts sufficient to pay the premiums from payments due to Contractor.

I. <u>Evidence of Insurance</u>. Prior to the performance of Services under this Agreement, Contractor shall furnish City's Risk Manager with a certificate or certificates of insurance and all original endorsements evidencing and effecting the coverages required under this Section 9. The endorsements are subject to City's approval. Contractor may provide complete, certified copies of all required insurance policies to City. Contractor shall maintain current endorsements on file with City's Risk Manager. Contractor shall provide proof to City's Risk Manager that insurance policies expiring during the term of this Agreement have been renewed or replaced with other policies providing at least the same coverage. Contractor shall furnish such proof at least two weeks prior to the expiration of the coverages.

J. <u>Indemnity Requirements not Limiting</u>. Procurement of insurance by Contractor shall not be construed as a limitation of Contractor's liability or as full performance of Contractor's duty to indemnify City under Section 8 of this Agreement.

K. <u>Subcontractor Insurance Requirements</u>. Contractor shall require each of its subcontractors that perform Services under this Agreement to maintain insurance coverage that meets all of the requirements of this Section 9.

10. Mutual Cooperation.

A. <u>City's Cooperation</u>. City shall provide Contractor with all pertinent Data, documents and other requested information as is reasonably available for Contractor's proper performance of the Services required under this Agreement.

B. <u>Contractor's Cooperation</u>. In the event any claim or action is brought against City relating to Contractor's performance of Services rendered under this Agreement, Contractor shall render any reasonable assistance that City requires.

11. Records and Inspections. Contractor shall maintain complete and accurate records with respect to time, costs, expenses, receipts, correspondence, and other such information required by City that relate to the performance of the Services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Contractor shall provide free access to City, its designees and representatives at reasonable times, and shall allow City to examine and audit the books and records, to make transcripts therefrom as necessary, and to inspect all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three years after receipt of final payment.

12. Termination of Agreement.

A. <u>Right to Terminate</u>. City may terminate this Agreement at any time, at will, for any reason or no reason, after giving written notice to Contractor at least five calendar days before the termination is to be effective. Contractor may terminate this

Agreement at any time, at will, for any reason or no reason, after giving written notice to City at least 60 calendar days before the termination is to be effective.

B. <u>Obligations upon Termination</u>. Contractor shall cease all work under this Agreement on or before the effective date of termination specified in the notice of termination. In the event of City's termination of this Agreement due to no fault or failure of performance by Contractor, City shall pay Contractor based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall Contractor be entitled to receive more than the amount that would be paid to Contractor for the full performance of the Services required by this Agreement. Contractor shall have no other claim against City by reason of such termination, including any claim for compensation.

13. Force Majeure. Contractor shall not be liable for any failure to perform its obligations under this Agreement if Contractor presents acceptable evidence, in City's sole judgment, that such failure was due to strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Contractor's reasonable control and not due to any act by Contractor.

14. Default.

A. Contractor's failure to comply with the provisions of this Agreement shall constitute a default. In the event that Contractor is in default for cause under the terms of this Agreement, City shall have no obligation or duty to continue compensating Contractor for any work performed after the date of default.

B. If the City Manager or his delegate determines that Contractor is in default in the performance of any of the terms or conditions of this Agreement, City shall serve Contractor with written notice of the default. Contractor shall have ten calendar days after service upon it of the notice in which to cure the default by rendering a satisfactory performance. In the event that Contractor fails to cure its default within such period of time, City may, notwithstanding any other provision of this Agreement, terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

15. Notices. Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Contractor's and City's regular business hours, or (c) three business days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

If to City: City of Manhattan Beach If to Contractor: Iteris, Inc. Attn: Ross Anderson Engineering Division 1400 Highland Avenue Manhattan Beach, California 90266 Telephone: (310) 802-5356 Email: <u>randerson@citymb.info</u> Attn: Dan Gilliam Vice President, Contracts 1700 Carnegie Ave., Ste. 100 Santa Ana, CA 92705 Telephone: (949) 270-9606 Email: contracts@iteris.com

With a courtesy copy to:

Quinn M. Barrow, City Attorney 1400 Highland Avenue Manhattan Beach, CA 90266 Telephone: (310) 802-5061 Email: <u>gbarrow@citymb.info</u>

16. Non-Discrimination and Equal Employment Opportunity. In the performance of this Agreement, Contractor shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. Contractor will take affirmative action to ensure that subcontractors and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

17. Prohibition of Assignment and Delegation. Contractor shall not assign any of its rights or delegate any of its duties under this Agreement, either in whole or in part, without City's prior written consent. City's consent to an assignment of rights under this Agreement shall not release Contractor from any of its obligations or alter any of its primary obligations to be performed under this Agreement. Any attempted assignment or delegation in violation of this Section 17 shall be void and of no effect and shall entitle City to terminate this Agreement. As used in this Section 17, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this Agreement to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

18. No Third Party Beneficiaries Intended. This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

19. Waiver. No delay or omission to exercise any right, power or remedy accruing to City under this Agreement shall impair any right, power or remedy of City, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this Agreement shall be

(1) effective unless it is in writing and signed by the Party making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

20. Final Payment Acceptance Constitutes Release. The acceptance by Contractor of the final payment made under this Agreement shall operate as and be a release of City from all claims and liabilities for compensation to Contractor for anything done, furnished or relating to Contractor's work or services. Acceptance of payment shall be any negotiation of City's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by City shall not constitute, nor be deemed, a release of the responsibility and liability of Contractor, its employees, sub-contractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by City for any defect or error in the work prepared by Contractor, its employees, sub-contractor, its employees, sub-contractors and agents.

21. Corrections. In addition to the above indemnification obligations, Contractor shall correct, at its expense, all errors in the work which may be disclosed during City's review of Contractor's report or plans. Should Contractor fail to make such correction in a reasonably timely manner, such correction may be made by City, and the cost thereof shall be charged to Contractor. In addition to all other available remedies, City may deduct the cost of such correction from any retention amount held by City or may withhold payment otherwise owed Contractor under this Agreement up to the amount of the cost of correction.

22. Non-Appropriation of Funds. Payments to be made to Contractor by City for services preformed within the current fiscal year are within the current fiscal budget and within an available, unexhausted fund. In the event that City does not appropriate sufficient funds for payment of Contractor's services beyond the current fiscal year, the Agreement shall cover payment for Contractor's services only to the conclusion of the last fiscal year in which City appropriates sufficient funds and shall automatically terminate at the conclusion of such fiscal year.

23. Exhibits. Exhibits A and B constitute a part of this Agreement and are incorporated into this Agreement by this reference. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Contractor's proposal, the provisions of this Agreement shall control.

24. Entire Agreement and Modification of Agreement. This Agreement and all exhibits referred to in this Agreement constitute the final, complete and exclusive statement of the terms of the agreement between the Parties pertaining to the subject matter of this Agreement and supersede all other prior or contemporaneous oral or written understandings and agreements of the Parties. No Party has been induced to enter into this Agreement by, nor is any Party relying on, any representation or warranty

except those expressly set forth in this Agreement. This Agreement may not be amended, nor any provision or breach hereof waived, except in a writing signed by both Parties.

25. Headings. The headings in this Agreement are included solely for convenience of reference and shall not affect the interpretation of any provision of this Agreement or any of the rights or obligations of the Parties to this Agreement.

26. Word Usage. Unless the context clearly requires otherwise, (a) the words "shall," "will" and "agrees" are mandatory and "may" is permissive; (b) "or" is not exclusive; and (c) "includes" or "including" are not limiting.

27. Time of the Essence. Time is of the essence in respect to all provisions of this Agreement that specify a time for performance; provided, however, that the foregoing shall not be construed to limit or deprive a Party of the benefits of any grace or use period allowed in this Agreement.

28. Business Days. "Business days" means days Manhattan Beach City Hall is open for business.

29. Governing Law and Choice of Forum. This Agreement, and any dispute arising from the relationship between the Parties to this Agreement, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in interpreting this Agreement. Any dispute that arises under or relates to this Agreement (whether contract, tort or both) shall be resolved in a municipal, superior or federal court with geographic jurisdiction over the City of Manhattan Beach.

30. Attorneys' Fees. In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover actual attorneys' fees, experts' fees, and other costs, in addition to all other relief to which that Party may be entitled.

31. Severability. If a court of competent jurisdiction holds any provision of this Agreement to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this Agreement shall not be affected and continue in full force and effect.

32. Counterparts. This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument.

33. Corporate Authority. The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement on behalf of the Parties and that by their execution, the Parties are formally bound to the provision of this Agreement.

[SIGNATURE PAGE FOLLOWS]

The Parties, through their duly authorized representatives are signing this Agreement on the date stated in the introductory clause.

City:

Contractor:

Iteris.

City of Manhattan Beach, a California municipal corporation

By:

Name: _____ Title:

ATTEST:

a Delaware Corporation By: ndu Schmidt Name: Title: VO Finance a CFI) By: Name: Awit 40.0 Title: VP, 1 MA M

By:

Name: Liza Tamura Title: City Clerk

APPROVED AS TO FORM:

By: (

Name: Quinn M. Barrow Title: City Attorney

APPROVED AS TO CONTENT:

By:

Name: Bruce Moe Title: Finance Director

EXHIBIT A SCOPE OF SERVICES

e.,



August 4, 2016

Mr. Ross Anderson Project Manager City of Manhattan Beach 1400 Highland Avenue Manhattan Beach, CA 90266

Re: Addendum to Proposal for RFP #1075-16, Traffic Signal Inventory & Design

P17-0074.17

Dear Mr. Anderson,

Iteris, Inc. (Iteris) is submitting an Addendum to Iteris' Response to the Request for Proposal (RFP) that will provide Traffic Signal Inventory and Design Services to the City of Manhattan Beach dated July 11, 2016. Per discussions with the City, the Addendum serves to add potholing option in Task 4. Enclosed in this addendum is the updated Scope of Work and Fee Schedule, which includes the following additions:

- Sub-consultant to perform ten (10) potholes that will be identified once additional field work has been performed to identify highest risk corners;
- Additional hours for Iteris staff to identify and schedule potholing locations; and
- Additional task to perform engineering and field investigation, as directed by City staff.

Thank you for the opportunity to submit this addendum. Please contact me at (949) 270-9527 or **rmm@iteris.com**, or the designated Project Manager, Mr. Frislie, at (949) 270-9597 or **pmf@iteris.com**, should you have any questions.

Sincerely,

Iteris, Inc.

Ramin Massoumi Senior Vice President & General Manager Transportation Systems



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APPENDICES

Appendix A – Resumes





1 | UNDERSTANDING SCOPE OF SERVICES

The City of Manhattan Beach has forty-nine (49) signalized intersections including one (1) flashing beacon within its boundaries, ten (10) of which are Caltrans owned and seven (7) are on Aviation Boulevard along the east City border and outside of the scope of this project, as shown below in **Figure 1**. As part of this project, a detailed inventory, design, and construction will be provided for the five (5) project intersections in the City's Downtown. The project will also include a detailed inventory and maintenance plan to upgrade the remaining twenty-seven (27) signalized intersections in the City.



Figure 1 – Project Study Area





The challenge many agencies, big or small, face is usually not the actual maintenance of the signals but the maintenance of records pertaining to the status of the signal equipment along with a central location for maintenance logs. Agencies who have a maintenance contractor may have a database of what has been serviced, but this will not provide an inventory of existing equipment, especially the condition of the equipment.

This project will provide the City of Manhattan Beach with an up-to-date database of not only the location of all traffic equipment (e.g. traffic poles, push buttons, cabinet, controller, etc.), but also the specific vendor, type, and condition. The City may choose to keep this database in any centrally located database in the City's network (e.g. Excel, ArcGIS, etc.) for ease of updating every time there is a maintenance call to either modify or replace an equipment. Furthermore, any relevant information that can be populated in the LA Metro ITS FIRST database to ensure future project funding from LA Metro.

Once the existing conditions are collected, similar to any ITS Master Plan, it is expected that there would be a plan to upgrade the necessary equipment, whether in one large project or multiple phases due to funding options, to get the City to where they need and want to be in the future. As the design and implementation of recommended upgrades in the Downtown area will be a part of this project, Iteris has performed a preliminary field visit of the five Downtown signalized intersections to get an idea of the condition of traffic signal equipment in the area. Our preliminary observations and recommendations are as follows:



Existing Conditions

- Type 332 Cabinet (NW Corner) w/ BBS
- 1 Signal Pole with Mast Arm in Poor Condition
- All Push Buttons (14 total) in Poor Condition
- **5** Pedestrian Heads in Poor Condition
- All Pedestrian Heads (12 total) Non-Countdown .
- 13 Signal Heads in Poor Condition (Including One Signal Head with 8" Lenses)
- 1 IISNS in Poor Condition and 1 Mast Arm with No . IISNS
- **EVP Installed on Two Mast Arms**



Recommendations

- 1 New Signal Pole and Mast Arm (Matching **Existing Poles**)
- 13 New LED Signal Heads with 12" Lenses
- 14 New ADA Push Buttons
- 12 New Countdown Pedestrian Heads
- **2 New LED IISNS**





MANHATTAN BEACH BOULEVARD AT HIGHLAND AVENUE



Existing Conditions

- Type 336 Cabinet (SE Corner) w/ BBS
- 3 Signal Poles with Mast Arms in Poor Condition
- 3 Type 1A Signal Poles in Poor Condition
- 6 Push Buttons in Poor Condition
- 3 Pedestrian Heads in Poor Condition
- All Pedestrian Heads (8 total) Non-Countdown
- 8 Signal Heads in Poor Condition (Including 2 Signal Heads with 8" Lenses)
- 3 Signal Heads in Good Condition with 8" Lenses
- 3 IISNS in Poor Condition
- EVP Installed on Two Mast Arms



Recommendations

- 3 New Signal Poles and Mast Arms (Matching Existing Poles)
- 3 New Type 1A Signal Poles
- 11 New LED Signal Heads with 12" Lenses
- 6 New ADA Push Buttons
- 8 New Countdown Pedestrian Heads
- 3 New LED IISNS

MANHATTAN BEACH BOULEVARD AT MANHATTAN AVENUE



Existing Conditions

- Type 336 Cabinet (SE Corner) w/ BBS
- 4 Signal Poles with Mast Arms in Poor Condition
- 3 Type 1A Signal Poles in Poor Condition
- All Push Buttons (8) in Poor Condition
- 7 Pedestrian Heads in Poor Condition
- All Pedestrian Heads (8 total) Non-Countdown
- All Signal Heads (14 total) in Poor Condition (Including 7 Signal Heads with 8" Lenses)
- 1 IISNS in Poor Condition and 3 Mast Arms with No IISNS
- EVP Installed on Two Mast Arms



Recommendations

- 4 New Signal Poles and Mast Arms (Matching Existing Poles)
- 3 New Type 1A Signal Poles
- 14 New LED Signal Heads with 12" Lenses
- 8 New ADA Push Buttons
- 8 New Countdown Pedestrian Heads
- 4 New LED IISNS





FIFTEENTH STREET AT HIGHLAND AVENUE



Existing Conditions

- Type 336 Cabinet (SW Corner) w/ BBS
- 4 Signal Poles with Mast Arms in Poor Condition
- 3 Type 1A Signal Poles in Poor Condition
- All Push Buttons (8) in Poor Condition
- 6 Pedestrian Heads in Poor Condition
- All Pedestrian Heads (8 total) Non-Countdown
- All Signal Heads (14 total) in Poor Condition (Including 9 Signal Heads with 8" Lenses, 1 "Doghouse" Protected-Permissive Signal Head, and 1 "Straight Line" Protected-Permissive Signal Head)
- 2 IISNS in Poor Condition and 1 Mast Arm with No IISNS
- **EVP Installed on Two Mast Arms**



Recommendations

- 4 New Signal Poles and Mast Arms (Matching **Existing Poles**)
- **3 New Type 1A Signal Poles**
- 14 New LED Signal Heads with 12" Lenses (Including 1 "Doghouse" Protected-Permissive and 1 "Straight Line" Protected-Permissive Signal Head)
- 8 New ADA Push Buttons
- 8 New Countdown Pedestrian Heads
- **3 New LED IISNS**



Existing Conditions

- Type 332 Cabinet (South Side Median) w/o BBS
- 3 Signal Poles with Mast Arms in Poor Condition 5 Type 1A Signal Poles in Poor Condition
- All Push Buttons (10) in Poor Condition
- 8 Pedestrian Heads in Poor Condition
- All Pedestrian Heads (10 total) Non-Countdown All Signal Heads (24 total) in Poor Condition
- (Including 5 Signal Heads with Visors)
- 1 IISNS in Poor Condition and 1 Mast Arm with No IISNS
- **EVP Installed on Two Mast Arms**



Recommendations

- **3 New Signal Poles and Mast Arms (Matching** . **Existing Poles**)
- 5 New Type 1A Signal Poles
- 24 New LED Signal Heads with 12" Lenses . (Including 5 Signal Heads with Visors)
- **10 New ADA Push Buttons**
- **10 New Countdown Pedestrian Heads**
- 2 New LED IISNS



FIFTEENTH STREET AT VALLEY DRIVE/ARDMORE AVENUE



2 | METHODOLOGY AND WORK PLAN

Iteris is uniquely qualified to perform this project as it has already assisted in uploading information on traffic signal equipment within the City of Manhattan Beach to LA Metro's ITS FIRST database as part of the Metro Countywide ITS Inventory Data Collection project (see **Statement of Qualifications**), as shown in **Figure 2**. This information includes data such as cabinet and controller types, controller firmware, types of communication present, and CCTVs. In the future, LA Metro will be requiring that the ITS FIRST inventory be updated when requesting funding as part of Calls for Projects. While this database is focused on determining potential ITS upgrades, the database can serve as a starting point for a robust GIS-based database focused on necessary maintenance for the City's equipment that details the condition and priority for upgrading or replacement of each individual signal pole, signal head, pedestrian head, pedestrian push button, etc.



Figure 2 – LA Metro ITS FIRST Database





Iteris proposes to use the information obtained from this database as a basis for a GIS-based database customized to the needs of the City of Manhattan Beach, detailing the condition and need for replacement of each individual traffic signal element at each of the thirty-two (32) signalized intersections included in this project.

With extensive traffic engineering and transportation planning knowledge and experience the staff possesses, Iteris' approach to this project is similar to an approach for generating an ITS Master Plan. **Figure 3**, on the following page, describe Iteris' general approach to providing traffic signal inventory and PS&E services to the City.



Figure 3 – Iteris Project Approach

Iteris staff will be present during the bid process to assist with any requests as well as provide construction management support during the construction of the Downtown signals. Iteris will also perform community outreach to discuss this project with the City's constituency. As the City of Manhattan Beach holds the input of its residents in high regard, at a minimum, community outreach meetings will be held both once the project scope is agreed upon as well as at the 90% completion stage in order to ensure that the public can still influence the direction of this project.

While the City has envisioned this project as being completed on a six month schedule, due to the potentially lengthy nature of the bid and construction process, Iteris has allotted a seven month schedule for this project. See **Section 6** for a detailed overview of Iteris' approach to scheduling for this project.

Iteris has organized the project scope into the six tasks noted below:

- Task 1: Project Management and Meetings
- Task 2: Survey, Inventory and Prioritizations (Downtown)
- Task 3: Survey, Inventory and Prioritizations (Citywide)
- Task 4: Project PS&E Package
- Task 5: Engineering and Field Investigation (As Directed by City)
- Task 6: Public Outreach
- Task 7: Bid and Construction





Scope of Work

Iteris developed the scope as presented in this section based on the firms' understanding of the goals and objectives of the project and Iteris' extensive experience on similar projects.



Iteris will hold a "kick-off" meeting with City staff at the onset of the project to discuss project approach and understanding as well as to review the project schedule. After completion of Phase 1A, Downtown traffic signal inventory, Iteris will meet again with City staff to discuss the direction of the design effort for Phase 2, design of the Downtown signal equipment, including design criteria, requirements, and procedures. After completion of Phase 1B, citywide traffic signal inventory, another meeting will be held to prioritize maintenance for the remaining traffic signal locations and discuss long-term budgetary expectations for future traffic signal maintenance.

Iteris' ability to implement high-quality deliverables is a result of the adherence to a quality assurance program that ensures accuracy, product usability and an overall commitment to product excellence and user satisfaction. Mr. Paul Frislie, Iteris Project Manager (PM), will ensure the team's commitment to these objectives by identifying goals at the outset of the project, and monitoring the product implementation and delivery process. Iteris strives to improve the processes and tools used to provide high-quality products and services.

Iteris' quality assurance procedures include internal management reviews. Mr. Alek Hovsepian, QA/QC Manager, is committed to maintaining a proper environment of the successful execution of the project, providing projects with adequate resources, and monitoring the effectiveness of the project PM and the project team.

Iteris will prepare monthly progress reports, progress schedule updates, and supporting data. In addition to the three meetings detailed above, Iteris will be available for any number of conference calls as requested.

Deliverables:

- Meeting agendas
- Meeting minutes with an Action Item list
- Critical path progress schedule
- Monthly progress reports with project invoices
- Progress schedule reports

Task 2. Survey, Inventory and Prioritization (Downtown)

As part of Phase 1A, Iteris will conduct a detailed field inventory at each of the five (5) existing traffic signals in the City's Downtown area. Iteris has extensive experience in conducting traffic signal inventories and has developed a thorough checklist that is used on projects of this nature. This checklist will be customized to meet the specific needs of the City of Manhattan Beach and employed by all project staff to ensure that the same information is collected by all Iteris personnel. A custom checklist to identify the





condition of all above-ground equipment at the five Downtown signals will be presented to the City for review during the kick-off meeting. This provides the City with an opportunity to review this checklist in advance of any field work performed to ensure a mutual understanding of the data that will be collected to ensure all the information necessary for detailed project plans meet the City's current and future needs. **Figure 4** on the following page illustrates an example of the level of detail Iteris provides in an equipment inventory.

Upon completion of the inventory of the Downtown signals, Iteris will prepare a database in GIS or Citypreferred formats that includes all obtained information for the City's use and that identifies the equipment in greatest need of replacement. This database will include labeling the physical condition of each signal pole, signal head, cabinet, battery backup system, pedestrian head, pedestrian push button, and any other above-ground equipment. In addition to populating the City-preferred database, Iteris will also make updates to necessary City layers in the LA Metro's ITS FIRST database.



Figure 4 – Example of Equipment Inventory Summary

Iteris will draft a Preliminary Design Report (PDR) containing recommended improvements based on the field inventory. A meeting will be scheduled with the City, as identified above in Task 1, to discuss these recommendations and design approach. Upon the City's approval, a final PDR will be submitted.

Deliverables:

- Populated inventory database (electronic GIS or City-preferred and ITS FIRST formats)
- Draft and Final Preliminary Design Report





Task 3. Survey, Inventory and Prioritization (Citywide)

As part of Phase 1B, Iteris will conduct a field inventory at the remaining 27 signalized intersections identified by the City (those not on Sepulveda or Aviation Boulevards). The field inventory process will be identical to that outlined in Task 2. The City database developed for the Downtown, as well as the LA Metro ITS FIRST database, will be updated to include the inventory information gathered as part of this phase.

Based on the field conditions of the remaining City signals, Iteris will identify the traffic signal equipment at these locations in greatest need of replacement and recommend a long-term plan for this maintenance that includes any budgetary restrictions noted by the City. These recommendations will be detailed in a technical memorandum to the City for review. A meeting will be scheduled to discuss these recommendations and upon the City's approval, a final Maintenance Recommendations Plan will be submitted for the City's future use.

Deliverables:

- Populated inventory database
- Draft Maintenance Recommendations Plan
- Final Maintenance Recommendations Plan



Task 4. Project PS&E Package

Upon completion of Phase 1A, Iteris will proceed to Phase 2 and begin preparing design plans for the final set of recommended upgrades and replacements to the five Downtown signalized intersections. Iteris will prepare Plans, Specifications and Estimates (PS&E) submittals at 60%, 90%, and 100% stages, with plan sets submitted to the City for review at each stage.

Iteris has extensive experience in providing the type of signal modification design requested for this project, including the replacement and installation of signal heads, signal poles, pedestrian heads, wiring, battery backup, and other above-ground signal equipment. Iteris is capable of providing these services in accordance with the design policies and standards of the City of Manhattan Beach, which include:

- Caltrans Section 86 and Los Angeles County Public Works specifications
- City of Manhattan Beach Standard Plans
- Americans with Disabilities Act Requirements
- California Manual on Uniform Traffic Control Devices (MUTCD)
- Plans prepared and delivered in AutoCAD format with City templates

Iteris will further perform the utility research and other field work necessary to provide an accurate set of design plans and is able to do so with expedience as to not impact the project schedule. Typical construction detail sheets will also be prepared to support construction of items shown on the field element design plans. These sheets will cover details such as signal head and pedestrian head mounting configuration, traffic signal pole foundations, and others needed to clearly illustrate the work required.





Utility Potholing

Iteris will further provide the services of its potholing subcontractor, C-Below, to perform potholing during the design phase of this project in order to minimize possible delays and cost overruns in the construction phase of the project. Iteris proposes to perform ten (10) potholes at those locations where possible utility conflicts may be most concerning. Iteris and C-Below will take into consideration the impacts of the potholing in the downtown area with minimal disturbance to the surrounding businesses. If needed, 24 to 48-hour notices will be distributed to the businesses notifying them of the work hours and locations.

A standard pothole is defined as 1'x1'x5' deep. Deviations from the standard pothole dimensions to locate a utility require additional time and material to facilitate. After documenting our findings, each pothole will be backfilled, compacted, and a perm-a-patch applied if applicable. If it is deemed necessary to repair the surface beyond a perm-a-patch, additional fees will apply and must be agreed upon prior to dispatch. A potholing report complete with photographs will be provided at the conclusion of the job documenting the location, utility found, depth to the top of the pipe, utility size, material, and the soil conditions. If no utility is found within the predetermined depth of the pothole, it will be considered a dry hole. Additional holes may be necessary to provide a positive location of the utility. All traffic control, permitting, and potholing will be provided by C-Below.

Design Plans

The design plans will be prepared by or under the direction of a Civil Engineer registered in the State of California, such as the Iteris PM and project Task Lead. Each plan sheet will bear the professional seal, certificate number, registration classification, and signature of the professional engineer responsible for its preparation.

Upon receiving comments from the City, utilities, and third party entities after submittal of a 100% PS&E package, Iteris will prepare the final PS&E submittal. This submittal will reflect all applicable comments provided by the reviewing parties. The final design plans will show all necessary information in adequate detail to permit construction and indicate and delineate all details necessary for a construction contractor. Final construction cost estimates will be provided in the form of a bid schedule. A detailed breakdown by project tasks, materials, components, etc. will be included in the bid package. The bid package will include detailed bid item descriptions for each bid listed in the bid schedule and prepared for the purpose of soliciting construction bids. The final estimates will be updated to reflect any revisions presented by the City in the 100% PS&E deliverable.

Deliverables:

- Pot Hole Report
- 60% PS&E package prepared in 20-scale AutoCAD format and submitted in 11"x17" sheet PDF format (physical and electronic copies)
- 90% PS&E package prepared in 20-scale AutoCAD format and submitted in 11"x17" sheet PDF format (physical and electronic copies)
- 100% PS&E package prepared in 20-scale AutoCAD format and submitted in 11"x17" sheet PDF format (physical and electronic copies)





- Final PS&E package on CD-RW containing:
 - All design plans prepared in 20-scale AutoCAD format in 24"x36" AutoCAD and PDF formats with seal and signature of a registered Professional Engineer
 - Engineering Cost Estimate in standard Microsoft Excel format
 - o Field review photographs and other studies

Task 5. Engineering and Field Investigation (As Directed by City)

Iteris will perform additional field investigation and/or engineering tasks as directed by the City staff throughout the life of the project.



Iteris understands that a major goal for the City of Manhattan Beach during construction projects is obtaining a deep link between the desires and needs of both the City and the public. Because of this, Iteris will be assisting the City in conducting extensive public outreach throughout the life of the project. As part of this project, Iteris will be attending at least two community outreach meetings to meet with residents and businesses that will be affected by this project. To better serve the City's constituents, these meetings will be held at times when the public's influence, concerns, and ideas can be effectively incorporated into the design package. This allows to public to take on an active role in the project to ensure the project satisfies the needs of all stakeholders. The first of the two public meetings will be held after Iteris and the City have had their meeting at the conclusion of Phase 1A to finalize the scope of the PS&E package, and the second public meeting will be held once the PS&E package is 90% complete.

Iteris will also attend at least three City Council and/or Commission meetings to keep the City's elected officials apprised of project status, schedule, and budget.

Deliverables:

- Presentations and handouts provided at meetings
- Project specific descriptions and summaries for staff reports
- Summary of meeting comments and outcomes



Task 7. Bid and Construction

Iteris staff will be available to assist the City with Request for Information (RFI) support throughout the bidding process. During the bid process, Iteris will be available to attend the pre-bid conference and answer technical questions from prospective bidders. Iteris will provide interpretation and/or clarification of the approved construction documents as the specifically relate to the design, design intent and execution of the project.

After the bid is awarded, Iteris will continue to support the selected Contractor by answering technical questions. Iteris will prepare final as-built drawings that incorporate all redline comments provided by the





Contractor and City project inspector and provide these drawings to the City on a CD-RW disk in AutoCAD and PDF formats.

Though a schedule has been provided with some assumptions, Iteris understands that the schedule for the bid process and construction will not be determined and/or finalized until the PS&E packages are complete; however, Iteris is committed to providing the City with the support needed during this process.

Deliverables:

 As-Built PS&E package on CD-RW containing all design plans prepared in 20-scale AutoCAD format in 24"x36" AutoCAD and PDF formats with seal and signature of a registered Professional Engineer



Iteris understands that the City is interested in creating a database for only above-ground signal equipment, which does not include opening the traffic signal controller cabinets. However, there is potential in generating a more detailed City inventory if it were to also include information on ITS devices that can only be inventoried inside of the controller cabinet, such as controller type/condition, emergency vehicle preemption, detection vendor/status, and communications. A maintenance plan that incorporates all signal equipment will be more robust and complete, even if some of the maintenance is shared with a different agency, as this will ensure the City is always up-to-date in all items. As an optional task, Iteris proposes to add information on ITS devices to the database that will be developed in Tasks 2 and 3 and incorporate recommendations for ITS improvements into the deliverables for those tasks.

In addition, Iteris proposes the option for the City to incorporate ITS upgrades into the PS&E package that will be developed for Task 4. In particular, Iteris proposes the option to design additional communication infrastructure for the five (5) Downtown signalized intersections to link these signals to those throughout the City. **Figure 5**, next page, details the information Iteris has on the City's wireless communication infrastructure, which specifically notes that none of the five Downtown signalized intersections possess communication equipment.





Figure 5 – Citywide Communication



Iteris allows the City the option to pursue all parts, some parts, or no part of this optional task as part of this proposal as Iteris understands that the recommendations in this task are exclusively outside the scope of work as stated in the RFP. However, Iteris believes that the addition of this information will help optimize the functionality of the database that will be created for the City in this project.

Deliverables:

• ITS Improvements to previous deliverables in Tasks 2, 3, and 4





3 | PROJECT MANAGEMENT

Work Assignments

Mr. Paul Frislie will serve as the Project Manager for this project. He will be the principal contact with the City and other entities per the City's direction. As Project Manager, Mr. Frislie will be responsible for coordinating the staff activities, coordinating meetings, project strategy, and will oversee work from project inception to completion. Mr. Frislie is a registered Professional Civil Engineer, a certified Traffic Signal Inspector and Technician, and has over 16 years of professional engineering experience in public and private sectors. He has served as the Project Manager for the cities of Gardena and Oxnard for over 5 years. He was also the Project Manager for the City of Cypress ITS Master Plans Project between 2010 and 2015. Besides on-call services, Mr. Frislie has also served as the Project Manager or Principal-In-Charge on numerous design/construction projects, operational analysis, and feasibility studies. With his extensive background and experience on other projects similar to this one, Mr. Frislie is the ideal Project Manager for the City. Mr. Frislie's contact information is provided in **Table 1**:

Table 1 – Project Manager's Contact Information

PROJECT MANAGER

Paul Frislie, PE, IMSA II Iteris, Inc. 1700 Carnegie Avenue, Suite 100 Santa Ana, CA 92705-5551 Phone: 949-270-9597 Fax: 949-270-9401 Email: pmf@iteris.com

KEY PERSONNEL ORGANIZATION

With offices in Santa Ana (headquarters), Los Angeles, and Berkeley, Iteris has the resources of over 100 staff throughout California dedicated to Traffic Engineering, Transportation Planning, and ITS, available to meet all the needs of the City.

Iteris' organization of proposed key staff is provided in **Figure 6**, followed by brief bios for each team member. Resumes for the Iteris Team are located in **Appendix A**.





Figure 6 – Project Team Organizational



Iteris Staff Bios



Paul Frislie, PE, IMSA I, IMSA II – Project Manager

Mr. Frislie serves as a Senior Transportation Engineer of Iteris' Transportation Systems division and has been with firm since January 2001. For over 16 years, Mr. Frislie has been involved in several transportation and traffic engineering projects that include both planning as well as design and deployment of ITS, systems integration, and traffic signal design. Recently, he has served as the Project Manager for the Rosecrans Avenue Arterial Improvement Project, Cypress Phase 1 through 3 ITS Projects, the Santa Clarita Phase 4 Master Plan project, the Newport Beach ITS Phase 5 through 8 Projects, the Santa Monica

ATMS Phase 4c project. He has also been the Lead Design Engineer for the development of design plans for the Oxnard ITS Master Plan Design Project, Vermont Avenue Arterial Improvement project, the Santa Monica ATMS 4a/4b Project, SR-710 ITS Design Project, Newport Beach ITS Phase 1, 2, 3, 4 and 7 Projects and the Fountain Valley Phase IV project, as well as the Signal Construction Inspector for completion of the Oxnard ITS Master Plan and the Rosecrans and Vermont Arterial Improvements.







Alek Hovsepian – QA/QC

Mr. Hovsepian serves as an Associate Vice President of Iteris' Transportation Systems division and has over 18 years of experience in managing high profile complex projects involving Intelligent Transportation Systems (ITS), ITS design and Inventory, Transit Priority and Communications systems. His experience includes ITS applications, project management, engineering design, procurement, construction management, Quality Control and Assurance, System maintenance and operations including five years of design build

projects nationwide. The ITS applications have included the use of systems engineering practices to plan, inventory, design, deploy and integrate ITS elements; advanced transportation management systems; transit signal priority system, deploy fiber optic, IP wireless radio for Ethernet/Gigabit Ethernet communication systems; as well as traditional analog/serial fiber optic transmissions. Recent project responsibilities include Project Management for the ITS Data Inventory Project, Metro Countywide Phase II Bus Signal Priority, Program Manager for City of Long Beach Public Works Department projects, and other systems design, installation, operation, testing and maintenance of ITS and communications systems project in Los Angeles area, South Bay Cities, North County, Gateway Cities, Orange County, City of Long Beach, City of San Mateo and San Francisco, CA.

Braulio Ramirez, PE - Task Lead



Mr. Ramirez has served as Transportation Engineer of Iteris' Transportation Systems division since August 2007. He has over eight years of experience with a background in Intelligent Transportation Systems (ITS) Design, Traffic Engineering, and has served as Project Engineer on numerous ITS and traffic engineering projects. Mr. Ramirez' experience includes field data investigations of traffic signals and interconnect; design of Gigabit Ethernet networks, wireless communication systems, fiber optic communication systems, Video Detection

Systems (VDS), CCTV cameras, Changeable Message Signs (CMS), signing & striping, traffic control, stage construction, neighborhood traffic management, traffic signal design, and operations of other ITS elements. He has worked with multiple agencies including Caltrans, LADOT, Minnesota DOT, Utah DOT, Kansas DOT, Texas DOT, and Missouri DOT, and is familiar with their design and CAD standard plans. Mr. Ramirez' software knowledge includes MicroStation, CADConform, AutoCAD, Synchro, and Tru-Traffic.



Chris Curd – Project Engineer

Mr. Curd has served as an Assistant Transportation Engineer of Iteris' Transportation Systems division since May 2015. Prior to joining Iteris, Mr. Curd served in the Traffic Engineering division of the City of Long Beach Public Works Department. Mr. Curd has been involved in several projects involving traffic signal inventory, design of traffic signal modifications and the design and installation of ITS equipment. With Iteris, Mr. Curd served on the project team for the Metro Countywide ITS Inventory Data Collection project, consisting of gathering data and creating a database on the traffic signal equipment of 86

agencies in Los Angeles County. Mr. Curd has also served on the project team for the Long Beach Blue Line Fiber Design project, Oxnard SCADA project, and the IowaDOT I-74 Bridge Reconstruction project. Mr. Curd's software knowledge includes AutoCAD, Microstation, Synchro, ArcGIS, as well as the i2, QuicNet, SCATS, MaxView, and ATSAC central traffic control systems.



Eunise Reynon – Project Engineer

Ms. Reynon serves as an Assistant Transportation Engineer for Iteris' Transportation Systems division and has been with the firm since July 2013. Ms. Reynon has over four years of experience in traffic operations and design. She has served as a Project Engineer on various traffic engineering projects, assisting in tasks such as field data collection and signal inventory, base plan preparation and signal design, and signal timing optimization. Ms. Reynon's specialized software knowledge includes ACTRA, CENTRACS, i2, MaxView, TACTICS, and ATMS.Now, and various traffic controller firmware such as ASC/2 and ASC/3, SEPAC, and McCain/BiTran 233/2033.







Dina Saleh – Project Engineer

Ms. Saleh has served as an Assistant Transportation Engineer for Iteris' Transportation Systems division since June 2014. She has participated in and provided support for the development of analysis for roadway modification projects, traffic signal synchronization projects, existing and future intersection traffic operations for land developments, Intelligent Transportation Systems (ITS), and Traffic Management Centers (TMC). Ms. Saleh has performed tasks such as field data collection, signal timing optimization, and traffic signal modification. Ms. Saleh's software and traffic control system knowledge includes

Synchro, Traffix, AutoCAD, ArcGIS, HCS, and Tru-Traffic. She is also well versed with design standards, HCM, MUTCD, AASHTO, and the California Highway Design Manual.



Wesley Luong – Assistant Engineer

Mr. Luong serves as an Assistant Transportation Engineer for Iteris' Transportation Systems division and has been with the firm since July 2015. Prior to joining Iteris, Mr. Luong served in the Traffic Studies Unit and Project Development Unit of Orange County Public Works. He has served as a Project Engineer on various traffic engineering, Intelligent Transportation Systems (ITS), and traffic signal synchronization projects, performing tasks such as field data collection, traffic signal design, signal optimization, and citywide traffic signal inventory. Mr. Luong's design experience includes wireless communication systems, fiber optics and

copper communication systems, Video Detection Systems, CCTV cameras, Battery Backup Systems, and signing and striping. Luong's software knowledge includes AutoCAD, Synchro, ArcGIS, CityGIS, and Microstation.



Abigail Roque – Assistant Engineer

Ms. Roque has served as an Assistant Transportation Engineer of Iteris' Transportation Systems division since June 2015. She currently works as a Project Engineer on various traffic engineering and traffic signal synchronization projects, performing tasks such as field data collection, traffic signal design, and signal optimization. Types of Data Collections that Ms. Roque has done includes Traffic Signal Inventory, Field Review, and Signal Timing Field Work. Traffic Signal Inventory includes opening up Traffic Signal Cabinets and identifying

equipment as well as the condition of the equipment, taking numerous pictures and creating a report to provide the City with up to date information. Field Review requires going on site and taking note of the existing conditions such as traffic signals, pull boxes, conduit runs, signing/striping, right of way, utilities and any damaged or missing items to accurately portray the City's intersections. With the existing conditions information, Ms. Roque is able to make traffic signal designs such as new conduit runs, changing permissive phasing to protected/permissive, changing protected/permissive to protected left turns, and upgrading a traffic signal from loops to Video Detection System. Ms. Roque has taken the lead in performing Signal Timing Field Work by verifying existing Traffic Signal phasing and operations such as permissive/protected phases, splits, overlaps, lead/lagging left turn phases and taking note of the lane configurations, signage and the traffic signal surrounding. Ms. Roque's software and traffic control systems knowledge includes AutoCAD, MicroStation, Synchro, TruTraffic and ArcGIS.

Delbert Smith-Lavezzari – Assistant Engineer



Mr. Lavezzari served as Junior Transportation Engineer of Iteris' Transportation Systems division since April 2016 and is now an Assistant Transportation Engineer. Mr. Lavezzari is a recent graduate, earning an undergraduate degree in Civil Engineering with an emphasis in Transportation Systems Engineering. Mr. Lavezzari has provided support on various ITS projects by performing field inventory, generating base AutoCAD design plans, and drafting summary reports of the field data collected. Mr. Lavezzari's software knowledge includes

AutoCAD, MicroStation, and Synchro.





Quality Assurance / Quality Control (QA/QC)

Quality Control is a key component of any successful project. Iteris' number one goal is the production of top quality products for clients. This is something that is kept in mind by employees at all times. It does not just apply to quality control for design plans or reports – something that has been standard procedure at Iteris for many years; but rather relates to all aspects of Iteris staff jobs and professional careers. As a firm and as individuals, Iteris always strives for excellence.

Superior technical quality is initiated through sound study and design procedures along with appropriate design review to ensure compliance with applicable design standards and accepted engineering practice. Technical quality is impacted significantly by appropriate staffing and ensured through appropriate quality control reviews by experienced, but otherwise uninvolved staff.

Mr. Alek Hovsepian, will be responsible for the overall Quality Control/Quality Assurance (QC/QA) aspect of this project. Within this role, he will develop an internal QC/QA team to review the products prior to delivery to the City for review and approval. In addition to the responsibilities previously listed, as Project Manager, Mr. Paul Frislie will work closely with Mr. Hovsepian during project execution so that he is aware of project deadlines as well as expected delivery dates of the individual products. Through similar experience on other recent projects, Mr. Frislie has extensive knowledge of the project scope and will have an integral role in this project with the overall QC/QA process. Figure 7 to right illustrates our QA/QC flowchart. Quality control checklists, tailored to the specific requirements of the City of Manhattan Beach's Traffic Signal Inventory and Design Project, will be developed and used throughout the QC process.

Iteris is certified with the International Organization for Standardization (ISO) 9001 Quality Management Program. This certification requires Iteris to be audited annually and our ISO 9001 certificate renewed every three years. As such, Iteris is recognized for establishing and applying a quality



system for the design and implementation of all transportation engineering projects. This project is no exception. Iteris staff will ensure that appropriate quality control procedures are implemented and that independent reviews are carried out for all key deliverables, and the guidelines set forth within the certified corporate ISO 9001 Quality Management Program are strictly followed.



Figure 7 – QA/QC Flowchart



4 | STATEMENT OF QUALIFICATIONS

About Iteris, Inc.

The City of Manhattan Beach has requested qualifications to provide a citywide traffic signal inventory and design services for the Downtown signals. This proposal focuses on our firm's core areas of expertise— Transportation Planning and Traffic Engineering / Intelligent Transportation Systems (ITS). For each of the areas mentioned above, the City will require the expertise of a mix of transportation and engineering professionals that are best suited to successfully complete a different variety of projects. Iteris



has the staff expertise and availability to achieve success for the City on these types of projects.

Company Background

Iteris, Inc. (Iteris) is the market leader in applying informatics solutions to the transportation industry. Decades of expertise in traffic management, along with superior services and patented products help a detect, measure, and manage traffic and vehicular performance; minimize traffic congestion; and empower Iteris clients with solutions to better manage their transportation networks. The firm is headquartered in Santa Ana, CA with offices nationwide.



Iteris combines the knowledge of transportation engineers, systems engineers,

system integrators, software engineers, and transportation planners to offer an unmatched combination of talent and experience. The innovative solutions Iteris develops and deploys help public agencies reduce traffic congestion, enhance transit use, monitor and manage transportation networks, and provide greater access to reliable traveler information.

Iteris was founded based on the principle of providing quality solutions on time and within budget. Iteris is committed to the transportation industry, striving to apply in depth knowledge to solve the most challenging problems associated with the movement of people and goods to enhance a growing economy. Iteris promises principal-level commitment to all projects and takes a disciplined approach to each project based on ISO 9001 standards, starting with an understanding of end-user needs. Iteris delivers precise solutions that meet customer needs and expectations based on the following core competencies:

- Traffic Signal Timing and Synchronization
- Planning and Design
 - o Travel Demand Modeling and Forecasting
 - o Traffic Engineering and Transportation Planning
 - o Transit
 - o ITS Planning and Design
 - Goods Movement

- System Integration
- Analytics
- Performance Monitoring and Management
- Research and Education
- Traveler Information
 - o Road Maintenance Weather Services
 - Traveler Information / 511




Relevant Services

Iteris has extensive relevant experience with metropolitan planning organizations, municipalities, and other agencies throughout California from planning to design to implementation, including all modes of transportation.

TRAFFIC ENGINEERING AND OPERATIONS

Iteris specializes in the design, evaluation and operation of intersections and arterials to improve the efficiency and safety of vehicular traffic flow, pedestrian mobility, transit operations and bicycle traffic. Services range from intersection layout; traffic signal design; re-striping plans; lighting plans; pedestrian safety studies; traffic control plans; development of arterial traffic calming measures; area-wide street network analysis; on-street parking improvements; inter-jurisdictional agreements; "before" and "after" evaluation studies; transit signal priority timing; and signal timing/coordination analysis. Iteris has co-



authored the industry standard *FHWA Traffic Control Systems Handbook* and has assisted multiple agencies throughout the United States in developing signal operation standards.

Iteris offers expertise in:

- Traffic Engineering and Operations
- Traffic Simulation
- Signal System Selection
- Signal System Deployment
- Warrant Studies
- Parking Design

- Road Widening/ Realignment
- Pedestrian Crosswalk Enhancement
- Bicycle Lane Design
- Signal Design
- Signal Operation/ Coordination
- Lighting Design
- Traffic Control Plans
- Training & Research
- Intersection Modifications
- Traffic Circles Planning/ Design
 - **Bulb-outs Design**

ITS PLANNING

ITS embrace complex multimodal surface transportation improvement solutions at a regional; sub-regional; corridor basis; and small area level. ITS employ communication networks and technologies that are networked together to exchange information; support coordinated cross-modal applications; and enhance interagency coordination. Careful planning for deployment of ITS systems requires a comprehensive understanding of local and regional ITS components, their interaction and their operation. Iteris has completed many ITS Planning projects, paving the way for ITS systems architecture, design, and deployment. Iteris has a wealth of experience working in large and small regions and with a wide variety of ITS stakeholders from cities to states, transit agencies, public safety agencies, emergency management agencies and the private sector.



Iteris offers expertise in:

- Regional ITS Architecture Development and Maintenance
- Communications Master Plan Development
- Traffic Signal System Planning and Design
- ITS Master Plan Development





ITS DESIGN



Iteris provides agencies worldwide with innovative and cost-effective approaches to the design and implementation of Intelligent Transportation Systems (ITS) field elements, communications networks, traffic management systems and Traffic Management Centers (TMC). Iteris produces complete Plans, Specifications and Estimates (PS&E) packages for CCTV cameras, Dynamic/ Changeable Message Signs (DMS/CMS), detection, information distribution (e.g. HAR), and Traffic Management Centers and communications networks. Iteris' communication designs include

numerous corridor and agency-wide Gigabit Ethernet networks for traffic management and agency-wide area networks (WAN), as well as SONET, ATM and serial networks. Iteris has designed communication networks comprised of fiber optics, twisted pair cable, spread spectrum and up to 1.4GB microwave wireless communications. Additionally, several of Iteris' communication network projects have included the procurement, integration and installation of Ethernet and Gigabit Ethernet hardware, providing agencies

with a turnkey solution to implementing a Gigabit Ethernet network. Iteris' TMC design services include feasibility analysis; functional operations and maintenance requirements; staffing analysis; conceptual layout; and final design. A state-of-the-art TMC must incorporate flexibility and expandability to allow for the integration of future technologies and growth. Iteris not only designs each TMC in concert with clients' current requirements, but also with accommodation for future needs and expansion.

Iteris offers expertise in:

- Communication Systems
- Detection Systems
- Surveillance Systems (CCTV)
- Information Delivery Systems
- Traffic Management Centers

SYSTEMS INTEGRATION



Systems integration is the key to success in today's multimodal, multi-agency complex operating environments, where engineering expertise and the skills needed to overcome institutional challenges are equally important. Whether deploying a new system, expanding a legacy system, or aggregating subsystems so that the system is able to deliver over-arching functionality, Iteris integrates hardware, software and the user-interface into a fully functional system that delivers the most cost-effective turnkey solution. Iteris has extensive experience in complex system engineering;

design; product development; systems integration; and implementation, including system acceptance testing. Iteris is committed to providing high-quality product and integration solutions to meet the client's needs during the entire life cycle of the program. Iteris understands customer relationships and what it takes to facilitate agreements among departments and agencies, as well as implementing and operating multi-

jurisdictional or intermodal systems. When it comes to understanding the connection between the subsystems, program phasing, interagency communications and integration, Iteris has the experience to deliver superior results. With backgrounds in systems engineering, object-oriented development and hardware/ software development, Iteris provides integrated solutions to solve current and future transportation challenges. The Iteris team develops and documents system requirements as well as performs system acceptance testing to ensure the results have met system requirements.

Iteris offers expertise in:

- Systems Management
- Systems Engineering
- Systems Installation
- Systems Design
- Systems and Software Development





CONSTRUCTION ASSISTANCE



Iteris helps keep traffic moving during project construction. The company's ITS, traffic engineers and transportation planning experts provide the combination of skills to anticipate traffic management challenges and implement traffic control plans and design. Iteris has significant experience in building consensus on construction period traffic patterns among public agencies, business owners and the public. Iteris also designs temporary installations of traffic control devices such as video/radar detectors, variable message signs and ramp meters that can be

relocated during various stages of construction. Traffic Management Plans (TMP) also frequently utilize portable variable message signs and highway advisory radio. Iteris experts prepare plans for temporary parking, temporary access to adjoining properties, and transit service and mitigation measures on detour routes. Iteris is fully acquainted with many local agency and Department of Transportation guidelines and requirements for TMP. Iteris also provides program and project management assistance to agencies during project construction by serving as an extension of agency staff, and directly interfacing with third party contractors. The company will ensure that the project is deployed according to plans and specifications on schedule and within budget.

Iteris offers expertise in:

- ITS Surveillance Elements
- Communications Infrastructure
- Traffic Management Planning
- Traffic Maintenance During Construction
- Staged Construction Analysis
- Community Outreach / Consensus Building
- Traffic Signals
- Traffic Management Centers
- Signing and Striping Plans
- Detour Plans
- Pre-construction Planning

Project Qualifications

Iteris has a history of successful projects with similar scope and work content for the many agencies throughout California. Iteris has a proven track record of on-time, within-budget performance on projects; and encourages the City to check with references provided with our project qualifications below. Iteris is proud of the reputation the company has earned, and the resulting numerous repeat clients. Iteris has initiated over 850 ITS/Engineering and Planning projects in the last five years. These projects include a wide range of public and private entities including local agencies, counties, MPO and Caltrans. Of these 850 projects, approximately 70% represent repeat clients - a testament to Iteris' ultimate client satisfaction goal.

Iteris' extensive traffic engineering, transportation planning and ITS experience is demonstrated by the following showcase listing of recent, relevant projects throughout California that encompass all the aspects of the City's project. In accordance with the RFP, Iteris has provided client contact references, along with projects completed for each reference. The projects are summarized in **Table 2** below followed by a detailed description of each project:





Table 2 – Relevant Project Experience Matrix

		AREAS	5 OF EXP	ERTISE	
PROJECT QUALIFICATIONS	Detailed Field Inventory	lnventory Summary/Database	iTS Planning	PDR and PS&E	Community Outreach
Iteris, Inc. Los Angeles County Metropolitan Transportation Authority (Metro)					
Countywide ITS Inventory Data Collection – Los Angeles County, CA					
ITS Phase 4 Master Plan – City of Santa Clarita, CA	\checkmark		\checkmark	\checkmark	
Traffic Signal Modernization Projects – City of Newport Beach, CA			\checkmark	\checkmark	
Citywide Ethernet Upgrade Design – City of San Marcos, CA	\checkmark	\checkmark			
Citywide Master Plan, Valley View Design, Phase 2 and Phase 3 Projects – City of Cypress, CA					
Mobility Element Update 2014 – City of Manhattan Beach, CA					
Engineering Services and Inventory Project – City of Buena Park, CA					

ITERIS QUALS

Metro Countywide ITS Inventory Data Collection - Los Angeles County, CA

Iteris was responsible for developing a project approach and methodology that enabled the collection and verification of ITS field inventory data for 86-agencies throughout the Los Angeles County area. Iteris attended sub-regional Council of Government technical advisory meetings to formally present the project approach and to facilitate the data collection process for participating municipalities. In addition, Iteris staff coordinated with the local cities to perform the necessary data collection from each agency, verified the data, and uploaded the data into Metro's ITS FIRST database. To enhance the data



collection, Iteris staff worked in conjunction with Metro to identify park and ride lots and conducted field verification of ITS equipment at 71 park and ride locations of integral transportation centers.





Key Personnel	Alek Hovsepian (Project Manager), Chris Curd (Project Engineer), Dina Saleh (Project Engineer)	
Client Reference	Eva Pan, Transportation Planning Manager, LA Metro, (213) 922-5602, PanE@metro.net	
Project Duration	Aug 2014 to Aug 2016	

ITS Phase 4 Master Plan- City of Santa Clarita, CA

The City of Santa Clarita developed a Master Plan in 2004, which detailed the City's traffic and ITS needs

at that time. Iteris assisted in preparing a detailed update to the City's ITS Master Plan to help serve the City for the next 10 years. Iteris served as the sub- consultant for this project. The ITS Master Plan detailed the long-term deployment of the following:

- The layout and requirements for upgrading the City's existing Traffic Management Center (TMC) and Backup TMC, based on a footprint area of the existing TMC.
- existing TMC.
 2. Two-way communications with all City of Santa Clarita signalized intersections.
- Center (TMC) int area of the City of Santa
- 3. Interties with Caltrans and the County of Los Angeles.
- 4. Expansion of the existing high-bandwidth, reliable and sustainable communications network that supports not only Traffic, but also citywide communications for the City Information Technology (IT) department, as well as other City departments, representing a means to deploying an integrated communications network.
- 5. Evaluation of new adaptive traffic signal systems.
- 6. Evaluation of the future of Connected Vehicles.
- 7. Identification of candidate locations for Closed Circuit Television (CCTV) cameras, system detection, and video detection systems and corresponding communication requirements.
- 8. Development of comprehensive capital cost estimates, and corresponding Operations and Maintenance costs, associated with the recommendations of the Traffic Signal System Master Plan.

Key Personnel	Paul Frislie (PM)
Client Reference	Cesar Romo, Traffic Signal System Administrator, City of Santa Clarita, (661) 286-4002, cromo@santa-clarita.com
Project Duration	Sep 2015 to Dec 2016

Traffic Signal Modernization Projects – City of Newport Beach, CA

Iteris served as the consultant for the City of Newport Beach on six ITS projects: (1) the Master Plan and Phase 1 Project in 2007; (2) the Phase 2 & 3 Project in 2008, (3) the Phase 4 & 7 Project in 2009; (4) the Phase 5 Project in 2010; (5) the Phase 6 Project (ongoing); and (6) the Phase 8 Project (ongoing). The Communications Master Plan detailed the upgrade of the leased T1 lines and VMS-330 traffic signal system with 820 traffic signal controllers to a combination of fiber optic cable and microwave radio supported by a new Centracs traffic signal system and ASC/3 traffic signal controllers. The





Communications Master Plan also detailed the deployment of ITS strategies including CCTV cameras and a new Traffic Management Center.

Based on the details of the Master Plan, Iteris completed the PS&E for all ITS projects. The projects replaced the existing twisted pair cable with fiber optic cable, upgraded the 820 traffic signal controllers with ASC/3 controllers, and deployed Cohu CCTV cameras. To date, approximately 90 of the City's 120 signalized intersections have been upgraded as part of the ITS Projects and approximately 23 CCTV cameras have been deployed.



In addition to the design, the project also included the analysis of signalized intersections encompassing each phase (100 signals total for all phases) for coordination timing during the AM, midday, PM and Saturday (Phase 1 only) peak periods. This analysis included data collection (average daily traffic and peak period turning movement counts with pedestrian and bicycle); review of the existing conditions; review of the existing actuated settings for coordinated and non-coordinated periods; and generating the optimum cycle lengths, offset and splits for each study intersection. Furthermore, Iteris conducted two days of signal timing training to City staff, which included basic phasing to implementation and fine-tuning using Centracs and Synchro.

Key Personnel	Paul Frislie (Design Lead), Braulio Ramirez, Eunise Reynon, Delbert Smith-Lavezzari
Client Reference	Brad Sommers, Senior Civil Engineer, City of Newport Beach, 949-644-3326, bsommers@city.newport-beach.ca.us
Project Duration	Apr 2007 to Present

Citywide Ethernet Upgrade Design - City of San Marcos, CA

Iteris was selected by the City of San Marcos to develop a modern design of the City's ITS communication system. This project identified the pre-existing conditions for every traffic signal in the project area and documented existing ITS and communication hardware. Based on the conditions, a design was developed to accommodate a redundant Gigabit backbone and all current and future ITS hardware. Iteris also provided construction support and integration services to have a fully operational ITS communication system at project completion.



Key Personnel	Braulio Ramirez, Paul Frislie (Project Engineers)
Client Reference	Michael Rafael, Senior Traffic Engineer, City of San Marcos, 760-744-1050x3274, mrafael@san-marcos.net
Project Duration	Aug 2014 to Aug 2016





Citywide Master Plan, Valley View Design, Phase 2 and Phase 3 Projects - City of Cypress, CA

Iteris served as the consultant for the City of Cypress on three ITS projects, including the Citywide Communication Design Master Plan and Phase 1 Valley View Project in 2010, the Phase 2 Project in 2010, and the Phase 3 project in 2014. The Citywide Communication Design report, which could also be considered a Master Plan, details the upgrade of the City's current traffic signal system along with the deployment of ITS strategies. The report includes a multi-phase plan for the communication buildout of the entire City on fiber optic cable, upgrading of existing CCTV cameras, and installation of fixed CCTV cameras.

Based on the details of the Master Plan, Iteris completed the PS&E for three ITS projects. The projects replace the existing twisted pair cable with fiber optic cable, upgrade the ASC/2 traffic signal controllers with ASC/3 controllers, and deploy Pelco encoders and Pelco fixed CCTV cameras.

During construction for each phase, Iteris is responsible for the network design, IP schema, and configuration of all the ITS elements including the field Ethernet Switches, aggregation hub switches, and CCTV encoders. The final task includes the integration of the new Communication Network with the development of a City Video Website broadcasting the new CCTV cameras. This website will include all the fixed cameras from each Phase once construction has been completed.



To date, all the City's signalized intersections have been upgraded as part of the three ITS Projects, 25 CCTV cameras have been upgraded and 45 fixed cameras have been deployed. The TMC was also upgraded with new LED monitors, CISCO router, and CCTV servers including an Aries Traffic Control system upgrade. During Phase 3 the traffic control system will be upgraded to Centracs by Econolite.

Key Personnel	Paul Frislie (Project Manager) Braulio Ramirez (Integration lead)
Client Reference	Keith Carter, Associate Traffic Engineer, City of Cypress, (714) 229-6750, kcarter@ci.cypress.ca.us
Project Duration	Communication Plan and Phase 1 – Feb 2010 to Mar 2012; Phase 2 – Nov 2010 to Present; Phase 3 – Sep 2011 to Dec 2014

Mobility Element Update 2014 - City of Manhattan Beach, CA

Iteris completed the City of Manhattan Beach Circulation Element as part of the General Plan update in 2003 and updated the Mobility Plan in 2014. While a major focus of the prior Circulation Element in 2003 was automobile oriented and development of a Neighborhood Traffic Management Program (NTMP), the 2014 Mobility Plan update is a multi-modal plan that includes emphasis on all modes including bicycles, pedestrians, transit users as well as those who use automobiles. The new mobility plan responds to State of California mandates such as 2008 California Complete Streets Act (AB 1358), the 2006 California Global Warming Solutions Act (AB 32) and the 2008 Sustainable Communities and Climate Protection Act (SB





375). The mobility plan development process included a series of public meetings, stakeholder meetings with residents, staff, police, fire, school district official and others. During the public input process, all modes of travel were discussed and specific issues and areas/neighborhoods for follow-up study were recommended. Recommendations for a phased bicycle plan, a phased pedestrian plan and transit improvements were included in the Mobility Element update. The plan also includes a review of best practices related to Complete Streets policies and programs as well as a review of multi-modal level of service (MMLOS) and how it may be applied to the City's infrastructure. The final plan includes updated goals and policies for mobility that ensure a balanced multi-modal transportation system that is oriented to Complete Streets and Active Transportation.

Key Personnel	Dina Saleh
Client Reference	Laurie Jester, City of Manhattan Beach, 310-545-5621, ljester@citymb.info
Project Duration	Nov 2012 to Jun 2016

Engineering Services and Inventory Project - City of Buena Park, CA

Iteris was selected to perform a complete signal inventory and assessment for Buena Park's 78 Intersections. The inventory includes:

- Controller Cabinet and equipment
 - Inventory of equipment as well as testing functionality of all devices
- Battery Back-up cabinet and equipment
 - Tested functionality of devices
- Traffic signal poles, signal heads, pedestrian heads and pushbuttons
- Assessment of intersection geometry
- Assessment of intersection signal phasing
- Signal service

The results of the inventory and assessment will serve as the basis in determining required upgrades and modifications needed to

ensure improved and safer traffic conditions for City travelers. This analysis will be used to determine future City projects and budgets.

Key Personnel	Braulio Ramirez, Chris Curd, Eunise Reynon, Dina Saleh, Wesley Luong, Abigail Roque
Client Reference	David Jacobs, PE, LS, Assistant City Engineer, City of Buena Park, djacobs@buenapark.com, 714-562-3679
Project Duration	Dec 2015 to Jul 2016







5 | RESOURCE ALLOCATION MATRIX

Table 3 – Key Staff and Availability

	STAFF										
TASKS	QA/QC Manager	Project Manager	Task Leader	Project Engineer	Assistant Engineer						
TASKS				pro line and p th	Represent Constraints						
Task 1. Project Management and Meetings	4	24	16	-	-						
Task 2. Survey, Inventory and Prioritization (Downtown)	2	8	12	20	20						
Task 3. Survey, Inventory and Prioritization (Citywide)	6	14	24	60	60						
Task 4. Project PS&E Package	10	22	48	80	80						
Task 5. Engineering and Field Investigation (As Directed by City)	4	8	14	27	17						
Task 6. Public Outreach	2	20	-	20	-						
Task 7. Bid and Construction	4	10	10	-	10						
Total Hours Labor	32	106	124	207	187						





6 | PROJECT SCHEDULE

Iteris has provided proposed project schedule below in Table 4.

Table 4	4 – Proj	ect Sch	nedule
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Task Name	Start	Finish	Duration +	W1 8/21	W2 W 8/28 9/	/3 W4 /4 9/11	W5 9/18	W6 9/25	W7 10/2	W8 10/9	W9 10/16	W10 10/23		W12	W13 11/13	W14 11/20		00.00	W17	W18 12/18	W19 12/25	W20 1/1	W21 1/8	W22 1/15
Task 1. Project Management and Meetings	Mon 8/22/16	Fri 2/3/17	120 days	1							1.1.1.1													
Manage Project	Mon 8/22/16	Fri 2/3/17	6 mons	1	1000	and the second	T alt	12 Jan	57% T	1	Profile in			2 10	STREE!	14	Ulea 1		1. 1. 1. 1.	(1997) (1997)	T. L. H.	115-371	1123	1 20
Project Kick-Off Meeting	Mon 8/22/16	Mon 8/22/16	1 day	1 8/	22																			
Meetings	Mon 9/26/16	Tue 10/11/16	12 days					1		ł.														
* Task 2. Survey, Inventory and Prioritizations (Downtown)	Mon 8/29/16	Mon 10/3/16	26 days		1		_		٦															
Signal Inventory	Mon 8/29/16	Mon 8/29/16	1 day		B.																			
Database Entry	Tue 8/30/16	Thu 9/1/16	3 days		IS.																			
Draft PDR	Fri 9/2/16	Fri 9/9/16	6 days			-1																		
City Review - PDR	Mon 9/12/16	Fri 9/23/16	2 wks			288																		
Final PDR	Tue 9/27/16	Mon 10/3/16	5 days					S	1															
 Task 3. Survey, Inventory and Prioritizations (Citywide) 	Tue 8/30/16	Mon 10/24/16	40 days		E							7												
Signal Inventory	Tue 8/30/16	Mon 9/5/16	5 days		1 h																			
Database Entry	Tue 9/6/16	Wed 9/14/16	7 days		Ĩ	h																		
Draft Maintenance Recommendations Plan	Thu 9/15/16	Mon 9/26/16	8 days			Ĭ		4																
City Review - Draft Maintenance Recommendations Plan	Tue 9/27/16	Mon 10/10/16	2 wks					1000	3															
Final Maintenance Recommendations Plan	Wed 10/12/16	Mon 10/24/16	9 days								¥													
Task 4. Project PS&E Package	Tue 10/4/16	Fri 12/2/16	44 days												-									
60% PS&E Package	Tue 10/4/16	Mon 10/17/16	10 days								4													
City Review - 60% PS&E Package	Tue 10/18/16	Mon 10/31/16	10 days								1225	18943	h											
90% PS&E Package	Tue 11/1/16	Fri 11/11/16	9 days			25							-	3	2									
City Review - 90% PS&E Package	Mon 11/14/16	Fri 11/25/16	10 days												188.13		1							
Final PS&E Package	Mon 11/28/16	Fri 12/2/16	5 days																					
Task 5. Public Outreach	Tue 9/6/16	Tue 12/20/16	76 days		Г									1	12.12	0.00								
First Public Outreach Meeting	Wed 9/7/16	Wed 9/7/16	1 day			9/7																		
Second Public Outreach Meeting	Wed 10/26/16	Wed 10/26/16	1 day									- 🔶 1	0/26											
First City Council Meeting	Tue 9/6/16	Tue 9/6/16	1 day			9/6																		
Second City Council Meeting	Tue 11/15/16	Tue 11/15/16	1 day												-	1/15								
Third City Council Meeting	Tue 12/20/16	Tue 12/20/16	1 day																	- 12	2/20			
Task 6. Bid and Construction	Mon 12/5/16	Mon 3/20/17	76 days														1							-
Assist Bid and Construction Process	Mon 12/5/16	Mon 3/13/17	71 days															let a		-				
As-Built Package	Tue 3/14/17	Mon 3/20/17	5 days																	1000	100 M			





7 | CONTRACT EXCEPTIONS

Iteris, Inc. takes no formal exceptions to the proposal or sample agreement.



EXHIBIT B APPROVED FEE SCHEDULE

2



August 4, 2016

Mr. Ross Anderson Project Manager City of Manhattan Beach 1400 Highland Avenue Manhattan Beach, CA 90266

Re: RFP #1075-16, Traffic Signal Inventory & Design - Addendum

P17-0074.17

Dear Mr. Anderson,

Iteris, Inc. (Iteris) is pleased to submit this fee schedule in response to Request for Proposal (RFP) to provide Traffic Signal Inventory and Design Services to the City of Manhattan Beach. Enclosed in this addendum is the updated Fee Schedule, which includes the following additions:

- Sub-consultant to perform ten (10) potholes that will be identified once additional field work has been performed to identify highest risk corners;
- Additional hours for Iteris staff to identify and schedule potholing locations; and
- Additional task to perform engineering and field investigation, as directed by City staff.

Iteris looks forward to assisting the City of Manhattan Beach on this important and successful inventory and design project. Please contact me at (949) 270-9527 or rmm@iteris.com, or the designated Project Manager, Mr. Frislie, at (949) 270-9597 or pmf@iteris.com, should you have any questions.

Sincerely,

Iteris, Inc.

Ramin Massoumi Senior Vice President & General Manager Transportation System



FEE PROPOSAL

		STAFF RATES										
TASKS		QA/QC Manager	Project Manager	Task Leader	Project Engineer	Assistant Engineer	LABOR HOURS	STAFF COSTS				
		\$200.00	\$170.00	\$135.00	\$105.00	\$95.00						
1	Project Management and Meetings	4	24	16	-	1	44	\$ 7,040.00				
2	Survey, Inventory and Prioritization (Downtown)	2	8	12	20	20	62	\$ 7,380.00				
3	Survey, Inventory and Prioritization (Citywide)	6	14	24	60	60	164	\$ 18,820.00				
4	Project PS&E Package	10	22	48	80	80	240	\$ 28,220.00				
5	Engineering and Field Investigation (As Directed by City)	4	8	14	27	17	70	\$ 8,500.00				
6	Public Outreach	2	20	-	20	-	42	\$ 5,900.00				
7	Bid and Construction	4	10	10	-	10	34	\$ 4,800.00				
	TOTAL HOURS LABOR	32	106	124	207	187	656					
						٦	TOTAL LABOR	\$ 80,660.00				
POTHOLING (10 POTHOLES)												
					OTHER	COSTS (M	ILEAGE, ETC.)	\$ 1,250.00				
105		-	25.04		-	TOTAL CO	ST ESTIMATE	\$ 89,910.00				

