

PROFESSIONAL SERVICES AGREEMENT
[On-Call Traffic Engineering Services]

THIS PROFESSIONAL SERVICES AGREEMENT (the "Agreement") is made at Orange, California, on this _____ day of _____, 2025 (the "Effective Date") by and between the CITY OF ORANGE, a municipal corporation ("City"), and ARCADIS U.S., INC., a Delaware corporation ("Contractor"), who agree as follows:

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide general on-call traffic engineering services to the reasonable satisfaction of City the services set forth in Exhibit "A," which is attached hereto and incorporated herein by reference. As a material inducement to City to enter into this Agreement, Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. The services which are the subject of this Agreement are not in the usual course of City's business and City relies on Contractor's representation that it is independently engaged in the business of providing such services and is experienced in performing the work. Contractor shall perform all services in a manner reasonably satisfactory to City and in a manner in conformance with the standards of quality normally observed by an entity providing such services to a municipal agency. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices. The terms and conditions set forth in this Agreement shall control over any terms and conditions in Exhibit "A" to the contrary.

Larry Tay, City Traffic Engineer ("City's Project Manager"), shall be the person to whom Contractor will report for the performance of services hereunder. It is understood that Contractor's performance hereunder shall be under the supervision of City's Project Manager (or his/her designee), that Contractor shall coordinate its services hereunder with City's Project Manager to the extent required by City's Project Manager, and that all performances required hereunder by Contractor shall be performed to the satisfaction of City's Project Manager and the City Manager.

2. Compensation and Fees.

a. Contractor's total compensation for all services performed under this Agreement, shall not exceed ONE HUNDRED THOUSAND DOLLARS and 00/100 (\$100,000.00) without the prior written authorization of City.

b. The above compensation shall include all costs, including, but not limited to, all clerical, administrative, overhead, insurance, reproduction, telephone, travel, auto rental, subsistence and all related expenses.

3. Payment.

a. As scheduled services are completed, Contractor shall submit to City an invoice for the services completed, authorized expenses and authorized extra work actually performed or incurred.

b. All such invoices shall state the basis for the amount invoiced, including services completed, the number of hours spent and any extra work performed.

c. City will pay Contractor the amount invoiced within thirty (30) days of receipt of all deliverables.

d. Payment shall constitute payment in full for all services, authorized costs and authorized extra work covered by that invoice.

4. **Change Orders.** No payment for extra services caused by a change in the scope or complexity of work, or for any other reason, shall be made unless and until such extra services and a price therefor have been previously authorized in writing and approved by City as an amendment to this Agreement. City's Project Manager is authorized to approve a reduction in the services to be performed and compensation therefor. All amendments shall set forth the changes of work, extension of time, and/or adjustment of the compensation to be paid by City to Contractor and shall be signed by the City's Project Manager, City Manager or City Council, as applicable.

5. **Licenses.** Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the work contemplated by this Agreement and that Contractor and its subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Agreement.

6. **Independent Contractor.** At all times during the term of this Agreement, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Agreement. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Agreement. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that it and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

7. **Contractor Not Agent.** Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

8. **Designated Persons.** Only those qualified persons authorized by City's Project Manager, or as designated in Exhibit "A," shall perform work provided for under this Agreement. It is understood by the parties that clerical and other nonprofessional work may be performed by persons other than those designated.

9. **Assignment or Subcontracting.** No assignment or subcontracting by Contractor of any part of this Agreement or of funds to be received under this Agreement shall be of any force or effect unless the assignment has the prior written approval of City. City may terminate this Agreement rather than accept any proposed assignment or subcontracting. Such assignment or subcontracting may be approved by the City Manager or his/her designee.

10. **Time of Completion.** Except as otherwise specified in Exhibit "A," Contractor shall commence the work provided for in this Agreement within five (5) days of the Effective Date of this Agreement and diligently prosecute completion of the work in accordance with the time period set forth in Exhibit "A" hereto or as otherwise agreed to by and between the representatives of the parties.

11. **Time Is of the Essence.** Time is of the essence in this Agreement. Contractor shall do all things necessary and incidental to the prosecution of Contractor's work.

12. **Reserved.**

13. **Delays and Extensions of Time.** Contractor's sole remedy for delays outside its control, other than those delays caused by City, shall be an extension of time. No matter what the cause of the delay, Contractor must document any delay and request an extension of time in writing at the time of the delay to the satisfaction of City. Any extensions granted shall be limited to the length of the delay outside Contractor's control. If Contractor believes that delays caused by City will cause it to incur additional costs, it must specify, in writing, why the delay has caused additional costs to be incurred and the exact amount of such cost at the time the delay occurs. No additional costs can be paid that exceed the not to exceed amount stated in Section 2.a, above, absent a written amendment to this Agreement.

14. **Products of Contractor.** The documents, studies, evaluations, assessments, reports, plans, citations, materials, manuals, technical data, logs, files, designs and other products produced or provided by Contractor for this Agreement shall become the property of City upon receipt. Contractor shall deliver all such products to City prior to payment for same. City may use, reuse or otherwise utilize such products without restriction.

15. **Equal Employment Opportunity.** During the performance of this Agreement, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any work covered by this Agreement, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

16. Conflicts of Interest. Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a consultant to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code. Contractor further agrees that it shall not be eligible to work as the design/build firm for the project that is the subject of this Agreement.

17. Indemnity.

a. To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold City, its City Council and each member thereof, and the officers, officials, agents and employees of City (collectively the "Indemnitees") entirely harmless from all liability arising out of:

(1) Any and all claims under workers' compensation acts and other employee benefit acts with respect to Contractor's employees or Contractor's subcontractor's employees arising out of Contractor's work under this Agreement, including any and all claims under any law pertaining to Contractor or its employees' status as an independent contractor and any and all claims under Labor Code section 1720 related to the payment of prevailing wages for public works projects; and

(2) Any claim, loss, injury to or death of persons or damage to property caused by any act, neglect, default, or omission of Contractor, or person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages due to loss or theft sustained by any person, firm or corporation including the Indemnitees, or any of them, arising out of, or in any way connected with the work or services which are the subject of this Agreement, including injury or damage either on or off City's property; but not for any loss, injury, death or damage caused by the active negligence or willful misconduct of City. Contractor, at its own expense, cost and risk, shall indemnify any and all claims, actions, suits or other proceedings that may be brought or instituted against the Indemnitees on any such claim or liability covered by this subparagraph, and shall pay or satisfy any judgment that may be rendered against

the Indemnitees, or any of them, in any action, suit or other proceedings as a result of coverage under this subparagraph.

b. To the fullest extent permitted by law, and as limited by California Civil Code 2782.8, Contractor agrees to indemnify and hold Indemnitees harmless from all liability arising out of any claim, loss, injury to or death of persons or damage to property to the extent caused by its negligent professional act or omission in the performance of professional services pursuant to this Agreement.

c. Except for the Indemnitees, the indemnifications provided in this Agreement shall not be construed to extend any third party indemnification rights of any kind to any person or entity which is not a signatory to this Agreement.

d. The indemnities set forth in this section shall survive any closing, rescission, or termination of this Agreement, and shall continue to be binding and in full force and effect in perpetuity with respect to Contractor and its successors.

18. Insurance.

a. Contractor shall carry workers' compensation insurance as required by law for the protection of its employees during the progress of the work. Contractor understands that it is an independent contractor and not entitled to any workers' compensation benefits under any City program.

b. Contractor shall maintain during the life of this Agreement the following minimum amount of comprehensive general liability insurance or commercial general liability insurance: the greater of (1) One Million Dollars (\$1,000,000) per occurrence; or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage and be written on an occurrence basis.

c. Contractor shall maintain during the life of this Agreement, the following minimum amount of automotive liability insurance: the greater of (1) a combined single limit of One Million Dollars (\$1,000,000); or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage for all owned, non-owned and hired vehicles and be written on an occurrence basis.

d. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Contractor under this Agreement.

e. Each policy of general liability and automotive liability shall provide that City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, but only with respect to the work performed by Contractor under this Agreement. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences

that City is an additional insured as a contracting party. The minimum coverage required by Subsection 18.b and c, above, shall apply to City as an additional insured. Any umbrella liability insurance that is provided as part of the general or automobile liability minimums set forth herein shall be maintained for the duration of the Agreement.

f. Contractor shall maintain during the life of this Agreement professional liability insurance covering errors and omissions arising out of the performance of this Agreement with a minimum limit of One Million Dollars (\$1,000,000) per claim. Contractor agrees to keep such policy in force and effect for at least five (5) years from the date of completion of this Agreement.

g. The insurance policies maintained by Contractor shall be primary insurance and no insurance held or owned by City shall be called upon to cover any loss under the policy. Contractor will determine its own needs in procurement of insurance to cover liabilities other than as stated above.

h. Before Contractor performs any work or prepares or delivers any materials, Contractor shall furnish certificates of insurance and endorsements, as required by City, evidencing the aforementioned minimum insurance coverages on forms acceptable to City, which shall provide that the insurance in force will not be canceled or allowed to lapse without at least ten (10) days' prior written notice to City.

i. Except for professional liability insurance coverage that may be required by this Agreement, all insurance maintained by Contractor shall be issued by companies admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide. In the case of professional liability insurance coverage, such coverage shall be issued by companies either licensed or admitted to conduct business in California so long as such insurer possesses the aforementioned Best rating.

j Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

k. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance.

l. Contractor shall include all subcontractors, if any, as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to City for

review and approval. All coverages for subcontractors shall be subject to all of the requirements stated herein.

19. Termination. City may for any reason terminate this Agreement by giving Contractor not less than five (5) days' written notice of intent to terminate. Upon receipt of such notice, Contractor shall immediately cease work, unless the notice from City provides otherwise. Upon the termination of this Agreement, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Agreement, unless termination by City shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

20. Maintenance and Inspection of Records. In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records, and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Agreement. City and its authorized representatives shall have access to and the right to audit and reproduce any of Contractor's records regarding the services provided under this Agreement. Contractor shall maintain all such records for a period of at least three (3) years after termination or completion of this Agreement. Contractor agrees to make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

21. Compliance with all Laws/Immigration Laws.

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws which may apply to the performance of this Agreement.

b. If the work provided for in this Agreement constitutes a "public works," as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid, to the extent Contractor's employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that it, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

c. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Agreement comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Agreement who is ineligible to work in the United States or under the terms of this Agreement; and

(3) Has properly maintained, and shall at all times during the term of this Agreement properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Agreement respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

d. Contractor shall require all subcontractors or subconsultants to make the same representations and warranties as set forth in Subsection 21.c.

e. Contractor shall, upon request of City, provide a list of all employees working under this Agreement and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Agreement without written notice to City, accompanied by the verification required herein for such employees.

f. Contractor shall require all subcontractors or sub-consultants to make the same verification as set forth in Subsection 21.e.

g. If Contractor or subcontractor knowingly employs an employee providing work under this Agreement who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, that shall constitute a material breach of this Agreement and may be cause for immediate termination of this Agreement by City.

h. Contractor agrees to indemnify and hold City, its officers, officials, agents and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Agreement.

22. Governing Law and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California and Contractor agrees to submit to the jurisdiction of California courts. Venue for any dispute arising under this Agreement shall be in Orange County, California.

23. Integration. This Agreement constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the work to be performed under this Agreement shall be of any force or effect unless it is in writing and signed by both parties. Any work performed

which is inconsistent with or in violation of the provisions of this Agreement shall not be compensated.

24. Notice. Except as otherwise provided herein, all notices required under this Agreement shall be in writing and delivered personally, by e-mail, or by first class U.S. mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

Arcadis U.S., Inc.
18401 Von Karman Avenue, Suite 300
Irvine, CA 92612
Attn.: Gabriel Murillo, TE

Telephone: 626-367-5347
E-Mail: gabriel.murillo@arcadis.com

“CITY”

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn.: Larry Tay, City Traffic Engineer

Telephone: 714-744-5525
E-Mail: ltay@cityoforange.org

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted electronically shall have the same effect as original signatures.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Agreement, the parties have entered into this Agreement as of the year and day first above written.

"CONTRACTOR"

ARCADIS U.S., INC., a Delaware corporation

*By: 
Printed Name: Wassim Selman
Title: Business Area Director, Mobility and
Executive Vice President

*By: 
Printed Name: Carol Evans
Title: Assistant Secretary, Arcadis U.S., Inc.

"CITY"

CITY OF ORANGE, a municipal corporation

By: _____
Daniel R. Slater, Mayor

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Nathalie Adourian, City Attorney

***NOTE:**

-- City requires the following signature(s) on behalf of the Contractor:

-- (1) the Chairman of the Board, the President or a Vice-President, **AND** (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please indicate. **OR**

-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to City.

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EXHIBIT “A”

SCOPE OF SERVICES

[Beneath this sheet.]

SECTION III

SCOPE OF WORK

RFP NO. 24-25.24

SECTION III: SCOPE OF WORK

All work shall be conducted on an as needed basis when requested in writing by the City Traffic Engineer or designated representative and according to the timeframe specified by the City. Work performed by the Consultant that has not be specifically identified and authorized by the City, will not be compensated.

The scope of work includes, but is not limited to:

- Traffic studies for capital projects
- Traffic and/or parking study review for private developments
- Traffic signal design
- Traffic control plan preparations
- Plan check for capital/development projects and traffic control plans
- Street light design and plan check
- Signing and striping plan preparation and plan check
- Traffic signal and street lighting construction inspection
- Construction management and construction engineering
- Technical support for funding and grant application
- Grant funding oversight
- Intelligent transportation systems (ITS) design
- Traffic signal timing and coordination studies
- Traffic counts and data collection
- Neighborhood traffic calming studies, warrant studies, and traffic investigations
- Special studies, civil design, and on-site support services may be requested
- General municipal traffic engineering services

The City of Orange manages 160 traffic signals, over 8,000 streetlights, over 20 miles of fiber optic network, the Traffic Management Center (TMC), radar feedback signs, pedestrian crossing and overhead flashers, and other devices to facilitate the safety of the public and efficiency of traffic. The City of Orange expects consulting firms to have thorough knowledge in traffic signal, ITS systems, street light design to perform required services. Firms are also expected to understand federal/state/local funding and policies, as well as Orange County Transportation Authority (OCTA) Comprehensive Transportation Funding Program (CTFP) requirements. The ideal firm(s) will have expertise in the areas above or may specialize in one or more subareas and will be capable to provide technical services associated with the general traffic engineering needs of the City of Orange.

All design work and improvement plan check services shall be performed by or under the responsible charge of a California License Professional Engineer (Civil, Traffic, and/or California License Land Surveyor as applicable) eligible to prepare and sign such plans. Successful firms will be required to enter into the City's standard professional services agreement (attached) and obtain an Orange business license. Any changes requested to the City's standard agreement must be noted in the response to the RFP for the City's consideration.

Each specific assignment under an on-call engineering services contract will be compensated on either lump sum or time-and-materials basis. The method of compensation will be specified in writing by the City at the time the assignment is given.

Generally, response times related to plan checks for the initial review shall be completed within **ten (10) working days**, unless otherwise directed by the City. Each subsequent plan check shall be completed within 5 working days unless otherwise directed by the City.

The scope of work will vary by project, and will be further defined in a project specific request by the City of Orange, but may generally include the following:

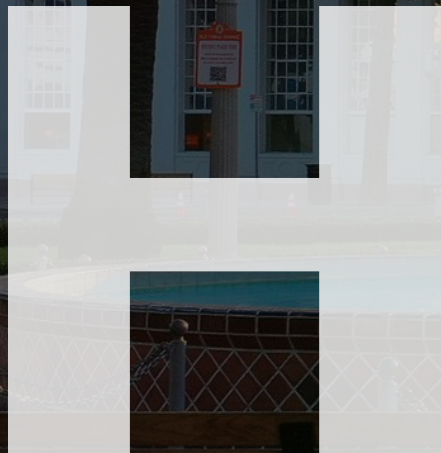
- **Design Plans** – Develop or assist with development of final design plans associated with traffic signals and street light systems. These plans include, but are not limited to: traffic signal plans, Intelligent Transportation Systems plans, traffic signal interconnect plans, and street light plans.
- **Program Management / Construction Management / Construction Inspection** – Services related to the City's Capital Improvement Program, which will typically include traffic signal and street light improvements, but may also include ancillary roadway rehabilitation, roadway widening, ADA access and handicap ramps, parkways, drainage and drainage structures, storm drain utilities, signage and striping, parks, and other miscellaneous facilities. A thorough understanding of the NPDES regulations and grant regulations, including Federally funded program compliance is required. Project manager and inspector must be able to coordinate with outside agencies such as adjacent cities, Caltrans, and various utility companies.
- **Transportation Analysis** – Specialized traffic studies to assess proposed projects within a short time frame. Typical studies would include travel demand or traffic forecasting of proposed roadways, street widening or intersection improvement projects. Studies will analyze diversion of traffic due to substantial long term construction projects. Analysis will incorporate pedestrian and bicycles. Additional studies could be needed to provide technical support for grant and funding applications.
- **Traffic Signal Corridor Coordination Studies** – Conduct studies that analyze the performance of traffic signal timing on street corridors. These studies shall include before and after analysis to quantify the level of improvement to the expected as a result of the project.
- **Simulation Modeling** – Provide computer simulation of corridors or road networks as needed utilizing microsimulation software. Training may also be included with these projects.
- **Traffic Counts** – Perform data collection as needed within short time frames including ADT's, 12-hour counts, intersection turning movement counts, occupancy rates, speed/delay runs, pedestrian and bike counts, parking turnover, etc.
- **Statewide Planning Efforts** – Specialized studies and analysis in support of various regional and statewide initiatives involving traffic signal improvements, timing, and coordination.
- **Research and Outreach** – Assist staff in producing reports and making presentations on transportation related topics.
- **Neighborhood Traffic Calming** – Assist staff in processing requests for traffic calming measures. This includes but is not limited to street and neighborhood evaluation, data collection, recommendations, design, and coordination/communication with residents.
- **Review for Private Developments** – Assist staff in reviewing plans and reports for private development projects. This includes but is not limited to: traffic signal plans, striping plans, street light plans, and various traffic studies. Coordination with project owners or design teams on behalf of the City may be requested.

Deliverables

The specific scope of work for each task/project will be provided in a written transmittal from a City of Orange representative along with, in most cases, a follow-up phone call and, if necessary, a meeting to discuss the specific needs of the assignment. Within five business days of receipt of transmittal, the Consultant will be expected to provide the City with a proposed level of support along with a NOT TO EXCEED cost. A fully-executed amendment to the on-call contract may be required along with an authorization to proceed prior to commencement of work.

Consultant is expected to have a close working relationship with City staff and remain very accessible throughout the contract duration. The Consultant shall act as an extension of City staff.

A member of the consulting firm will be required to attend meetings with other jurisdictions, City departments, or public outreach events if an individual project requires extra coordination.



WORK PLAN

PROJECT UNDERSTANDING

The City of Orange is seeking professional engineering services to support a wide range of civil and traffic engineering needs. Arcadis brings an exceptional depth of experience in civil design, traffic engineering, planning, and construction management—significantly enhancing the engineering capabilities available to the City. An ideal on-call consultant must not only meet diverse technical requirements, but also respond quickly to task orders with aggressive timelines, all while upholding the highest standards of quality. Arcadis is well-equipped to meet these demands.

For each task order, Arcadis will initiate the process with a kickoff meeting involving City staff and relevant stakeholders with jurisdiction over the project area. These meetings are essential to fully define the project scope and align on specific needs and expectations. Following each meeting, Arcadis will promptly provide meeting minutes and action items to the City, supporting clear communication and maintaining a complete record of all decisions. This proactive and collaborative approach helps build a strong working relationship and ensures alignment from the outset of each assignment.

Arcadis employs methodologies that reflect the most current and applicable standards and guidelines. These include the City's standards, the Highway Capacity Manual (HCM), Institute of Transportation Engineers (ITE) Trip and Parking Generation Manuals, Federal Highway Administration (FHWA) standards, and the California Manual on Uniform Traffic Control Devices (CAMUTCD). As applicable, we will also reference local agency standards, American Public Works Association (APWA) Standard Plans for Public Works Construction, Caltrans Standard Plans and Specifications, and AASHTO's *Policy on Geometric Design of Highways and Streets*. All analysis will strictly conform to the City's current guidelines.

Where Level of Service (LOS) analysis is required, Arcadis will utilize methodologies consistent with the City's Traffic Impact Analysis Guidelines—typically the Intersection Capacity Utilization (ICU) method. However, the HCM may be used, especially in areas with high pedestrian activity, to provide a more context-sensitive and accurate assessment. These methods align with the LOS policies outlined in the City's General Plan Circulation Element and the Orange County Congestion Management Plan (CMP) Guidelines, ensuring that all analyses are robust, defensible, and tailored to the unique conditions of each project.

Arcadis staff will act as an extension of City staff, serving as dedicated advocates for the City's interests during all phases of project planning, coordination, and review. Prior to initiating any task, Arcadis will review the proposed scope, schedule, and budget with City staff to confirm alignment and avoid unanticipated costs. Any adjustments to labor allocation or scope will be communicated promptly, allowing for timely decision-making and transparency throughout the process. This collaborative approach underscores Arcadis' commitment to fiscal responsibility and to delivering high-quality, responsive service to the City of Orange.

SCOPE OF WORK

While the scope of work will vary by project, it will be further defined through project-specific requests issued by the City of Orange. As outlined in the Request for Proposals (RFP), potential services may include the following:

- Review/Design of Engineering Plans
- Program Management/Construction Management/Construction Inspection
- Transportation Analysis
- Traffic Signal Corridor Coordination Studies
- Traffic Counts
- Statewide Planning Efforts
- Research and Outreach
- Neighborhood Traffic Calming
- Review of Private Developments

PROJECT MANAGEMENT

Every task order issued under this agreement will necessitate project management to ensure successful execution and delivery. Arcadis is committed to providing a framework of project management duties, encompassing, but not limited to, the following critical activities:

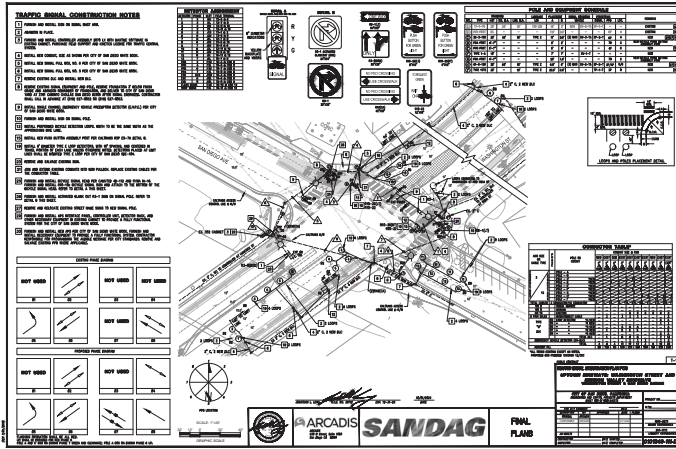
- **Schedule a Kick-off Meeting:** Promptly initiate each project with a kick-off meeting. This crucial first step will involve city representatives, project managers, and relevant team members, to establish a shared understanding of project objectives, scope, roles, responsibilities, and communication protocols. The meeting will lay the foundation for effective collaboration and align expectations from the outset.
- **Prepare a Schedule and Budget:** Develop a project schedule outlining key milestones, timelines, and resource allocation. Concurrently, a project budget will be prepared, breaking down anticipated costs for labor, materials, and other expenditures. These documents will serve as essential tools for monitoring progress, controlling costs, and ensuring the project remains on track and within financial parameters. Regular updates and adjustments to the schedule and budget will be made as needed throughout the project lifecycle.
- **Schedule Project Meetings:** Implement a structured cadence of regular project meetings to facilitate ongoing communication, progress monitoring, and issue resolution. These meetings will include internal team meetings, client progress reviews, and specialized technical discussions as required. Agendas will be distributed in advance, minutes will be recorded, and action items will be clearly assigned and tracked to ensure accountability and maintain project momentum.
- **Ensure Quality Control for Each Deliverable:** Establish and implement a rigorous quality control (QC) process for every deliverable produced throughout the project. This will involve defining clear quality standards, conducting thorough reviews and inspections, and implementing corrective actions to address any deficiencies. The QC process will ensure that all outputs meet the highest standards of accuracy, completeness, and client satisfaction, reflecting Arcadis' commitment to delivering excellence.

TRANSPORTATION PLANNING STUDIES

- Traffic impact for capital projects
- Parking study review for private developments
- Traffic circulation evaluations
- Travel demand forecasting
- Corridor studies
- Traffic calming analysis and design
- Infrastructure transportation planning studies
- Active transportation and Safe Routes to School studies

Typical transportation planning studies conducted by Arcadis involve the following principal tasks:

- **Project Scoping and Coordination:** This phase entails collaboration with the city, identification of salient issues, delineation of the study area, assessment of affected roadways and facilities, and establishment of a mutually agreed-upon methodology.
- **Data Collection:** This involves a comprehensive field review of existing transportation infrastructure in the vicinity of the project, collection of traffic data (as detailed below), and a thorough review of pertinent recent documentation.
- **Project Analysis:** This includes an evaluation of the project's trip generation potential, mode split (automobile, transit, truck, non-motorized), capacity analysis of roadway links and/or intersections, and an assessment of transit system impacts.
- **Deficiency Identification:** This step focuses on pinpointing shortcomings within the transportation system attributable to the project, cumulative conditions, or both, as measured by level of service, traffic volumes, and projected speeds.
- **Recommendations:** Proposed solutions include physical enhancements to intersections, lanes, bridges, freeway facilities, transit facilities, bicycle facilities, and other infrastructure, alongside operational improvements or modifications.
- **Documentation:** This crucial task ensures that the generated documentation is lucid and comprehensible not only to technical professionals but also to the general public, given that transportation planning frequently constitutes a pivotal component of local development projects.



TRAFFIC ENGINEERING DESIGN

Arcadis will prepare traffic engineering plans, specifications, and estimates (PS&E) in strict conformance with the latest city and Caltrans Standards. This includes, but is not limited to the following:

- Traffic signal design
- Traffic control plan preparation
- Plan check for capital/development project and traffic control plans
- Street light design and plan check
- Signing and striping plan preparation and plan check
- Intelligent transportation systems (ITS) design
- Traffic management center (TMC) enhancements



To ensure seamless coordination and prevent costly delays, a thorough investigation of existing utility companies and City records is top priority. This allows for the accurate verification of field conditions and the early identification of potential utility conflicts, thereby minimizing the risk of contract change orders during the construction phase. Upon completion of the research, design plans for the projects will be crafted. These projects will encompass detailed plans, precise specifications, and an engineer's

construction cost estimate. All specifications will be prepared in Microsoft Word, with both physical and electronic copies provided to the City. The City will furnish Arcadis with the necessary specification boilerplate to ensure adherence to established standards.

All plans will be professionally drafted utilizing AutoCAD programs, or as otherwise directed by the City. The utmost care will be taken to ensure that all drawings strictly adhere to City standards, guaranteeing consistency and compliance.

Finally, a critical step in the project's progression involves the signing and stamping of all original plan sheets, the title sheet of the specifications, all calculations, and all reports by Arcadis' licensed professional engineer overseeing the project. These signed originals will subsequently become the exclusive property of the City, representing a complete and verified record of the project's design and engineering.

Our civil/transportation infrastructure design will adhere to current safety, efficiency, and legal compliance guidelines. We will follow the latest California Vehicle Code, Caltrans Standard Plans and Specifications, and Highway Design Manuals. Traffic control devices will comply with the Federal and California Manual on Uniform Traffic Control Devices (MUTCD). Additionally, all other applicable local, county, state, and federal policies will be integrated, ensuring a robust, sound, and publicly beneficial design.

GRANT APPLICATION ASSISTANCE

Arcadis brings a proven track record of success in assisting agencies with securing crucial grant funding. Our extensive experience navigating the complexities of various grant applications has equipped us with invaluable insights and best practices. These lessons learned will be directly applied to every task order issued under this contract, ensuring a streamlined and effective approach to funding acquisition. Recently, Arcadis helped OCTA secure funding for the cloud-based Transit Signal Priority pilot project for Harbor Blvd. Arcadis engineers are familiar with the OCTA's Comprehensive Transportation Funding Program requirements, having assisted agencies with both grant applications and project execution for Project P initiatives.

We offer support throughout the grant lifecycle, starting with identifying suitable opportunities and continuing through application submission and post-award compliance. This ensures that our clients are not only successful in securing grants but also in maximizing their utilization and demonstrating tangible results.

For Project P applications, upon receiving recommendations and specific direction from City staff, Arcadis will develop a supplemental application document. This critical document will go beyond standard requirements, providing a narrative of the project. Key components of this supplemental application will include:

- **Project Scope Write-Up:** A thorough description of the project, detailing its objectives, methodologies, anticipated outcomes, and the specific problems it aims to address. This section will be crafted to highlight the project's significance and alignment with funding priorities.
- **Detailed Tables:** Data-rich tables will be incorporated to present essential information clearly and concisely. This may include budget breakdowns, stakeholder involvement matrices, performance metrics, and other relevant quantitative data, enhancing the application's credibility and ease of review.
- **Project Schedule:** A clear and realistic timeline outlining key milestones, deliverables, and responsibilities. This schedule will demonstrate careful planning and understanding of project execution, assuring funders of the project's feasibility and timely completion.

By providing this elevated level of detail and strategic presentation, Arcadis aims to significantly strengthen the grant application and maximize the probability of securing funding for the City's vital initiatives.



DATA COLLECTION

Arcadis stands at the forefront of intelligent transportation systems, offering specialized services in the collection and analysis of inventory data for a range of roadway signs and critical traffic control devices.

The collected data serves as the foundation for Arcadis's expertise in safety analysis and actionable recommendations. By analyzing the condition, placement, and compliance of roadway signs and traffic control devices, Arcadis identifies potential safety hazards and proposes strategic improvements designed to enhance public safety on the roadways. To support this analysis, Arcadis provides clients with detailed data sheets. These documents are developed with geospatial information, offering location data for each inventoried item. Accompanying photographs provide visual context, while thorough assessments offer evaluations of condition and functionality. This holistic data presentation ensures that clients have all the necessary information to make informed decisions regarding infrastructure maintenance, upgrades, and safety enhancements.

Traffic Counts

Arcadis' traffic count sub-consultant, AimTD LLC, is equipped to conduct comprehensive traffic data collection, encompassing counts between signalized corridors, at mid-block locations, and within intersections, as required. AimTD offers the following services:

- Tube and video counts
- Certified speed radar surveys
- 24-hour machine speed and volume counts
- Intersection approach counts
- Intersection turning movement counts
- Pedestrian and bicycle volume counts

TRAFFIC SIGNAL SYSTEM OPERATIONS

Arcadis boasts unparalleled experience in traffic operations improvements across the world, encompassing traffic signal timing optimizations, traffic management strategies, and staffing traffic management centers. We offer extensive signal timing and synchronization services, including:

- Monitoring traffic signal timing
- Updating timing parameters to comply with the latest State or Federal Standards (e.g., pedestrian flashing-don't walk, yellow change interval)
- Responding to residents' requests for signal timing checks

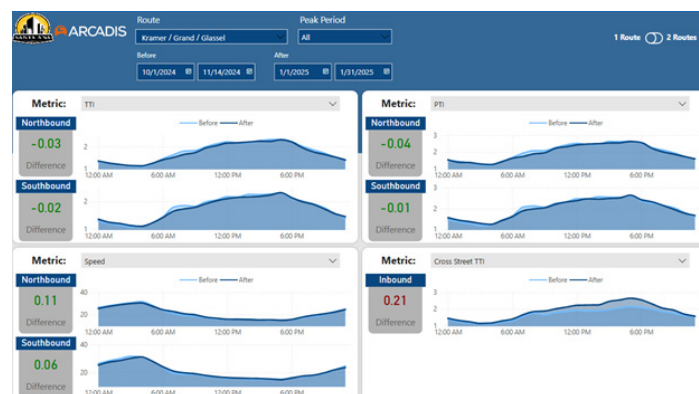
- Preparing and implementing signal timing sheets for new or modified signals
- Preparing and implementing special event signal timing
- Reviewing traffic signal timing sheets prepared by other entities



Arcadis is well-equipped to assist the city in developing and implementing traffic signal timing and synchronization plans along its corridors. Our comprehensive traffic signal operations services, which exemplify our experience with timing requirements and expectations, generally include:

- **Timing Parameters:** Continuously updating the City's general timing parameter guidelines to ensure compliance with current State and Federal requirements.
- **Coordination Timing Plans:** Generating SYNCHRO networks with the latest timing plans to ensure continuous coordination and updates across crossing corridors.
- **Implementation and Fine-Tuning:** Implementing signal timings in field controllers or at the city's TMC and performing necessary field fine-tuning. We are highly familiar with Centrac and all types of Econolite controllers used at the city's signalized intersections.
- **Signal Coordinated Studies (before and after travel times):** "Before" studies are conducted to establish baseline travel times along study corridors. This data can be used for quantifying improvements achieved through new signal timing plans. Following the implementation of new signal timing plans, "after" studies are conducted to measure the resulting changes in travel times and other performance metrics. The methodologies employed in "after" studies mirror those used in the "before" phase, ensuring a direct and comparable analysis.

Arcadis offers an advanced solution for traffic management, leveraging sophisticated analytics to transform raw data into actionable insights. By integrating third-party data sources, Arcadis can construct a comprehensive dashboard specifically designed for traffic operations performance reporting. This dashboard serves as a critical tool for City planners and traffic engineers, enabling them to gain a holistic view of traffic patterns, congestion points, and overall network efficiency. The reporting provided by Arcadis aims to facilitate a proactive methodology to traffic management, ultimately leading to reduced travel times, decreased fuel consumption, lower emissions, and an improved quality of life for residents.



In addition to conducting travel-time runs, Arcadis can utilize the comprehensive, traffic flow dashboard which integrates multiple data sources, including both proprietary and third-party data, to deliver up-to-the-minute information on traffic speed, congestion, and other relevant factors. By providing a detailed, real-time, and historical understanding of traffic patterns, the dashboard will enable users to proactively make informed decisions about traffic management strategies, incident response, and overall transportation system performance.

Furthermore, the dashboard is designed with user-friendly features, including customizable alerts, interactive maps, and historical trend analysis tools. These features allow users to tailor the dashboard to their specific needs and gain valuable insights into traffic patterns over time. The dashboard is accessible across multiple devices, ensuring that users can access critical traffic information anytime and anywhere.

Arcadis is actively leveraging this cutting-edge dashboard in significant projects, demonstrating its proven utility and effectiveness. For example, it is currently a core component of the OCTA Countywide Baseline Project and Harbor Blvd Pilot TSP Project, playing a vital role in understanding and optimizing the transportation network.

ON-SITE SUPPORT

Arcadis offers on-site support services, providing highly skilled engineers readily available to assist with a diverse range of critical duties. Our team will seamlessly integrate with your project, ensuring efficient execution and prompt problem resolutions.

Our on-site engineering support encompasses the following key areas:

- **Program Management/Construction Management/ Construction Inspection:** Arcadis engineers bring extensive experience in overseeing complex infrastructure projects. This includes program management to ensure projects stay on schedule and within budget, construction management to maintain quality and safety standards, and thorough construction inspection to verify adherence to design specifications and regulatory requirements. Our on-site presence allows for real-time decision-making and proactive risk mitigation, leading to successful project delivery.



- **Traffic Network Troubleshooting:** With an in-depth understanding of complex traffic systems, our engineers are skilled at identifying and resolving issues that disrupt traffic flow. This includes optimizing timing plans, analyzing congestion points, and implementing solutions to enhance network efficiency and minimize delays. Local Arcadis engineers possess in-depth knowledge of the City's traffic communication network, enabling them to quickly address emerging traffic challenges and ensure safe and smooth transportation for all modes of traffic. Our engineers utilize advanced diagnostic tools and methodologies to pinpoint root causes, whether they stem from electrical faults, software glitches, communication breakdowns, or environmental factors. We are committed to minimizing downtime and restoring optimal traffic conditions swiftly.



- **Inter-Agency Coordination:** Large-scale projects often involve multiple stakeholders and regulatory bodies. Arcadis engineers excel at facilitating seamless communication and coordination between various agencies, including local, state, and federal authorities, utility companies, and community groups. Our on-site presence allows us to act as a central point of contact, streamlining approvals, resolving conflicts, and ensuring all parties are aligned with project goals and timelines.
- **Addressing Resident Complaints:** We understand the importance of community engagement and minimizing disruption to residents during construction and infrastructure improvements. On-site engineers will serve as a direct liaison between the project team and the community, sensitively and effectively addressing resident complaints and concerns. This includes investigating issues, providing clear and timely communication, and working to implement solutions that mitigate impacts and maintain positive community relations.

HOURLY RATES

Hourly rate fees for Arcadis U.S., Inc. professional services are indicated below:

Staff Category	Billing Rate
Senior Advisor	\$459.00
Principal Engineer	\$325.00
Senior Engineer	\$290.00
Engineer	\$185.00
Associate Engineer	\$165.00
Administrative	\$125.00

ADDITIONAL TERMS

Invoicing and Payment: Progress invoices will be issued monthly and payment is due within thirty (30) days of invoice date. Invoices for subcontractor charges are payable upon presentation.

Travel and Related Expenses: Company and personal vehicles will be charged at the IRS allowable mileage reimbursement rate.