

# Attachment 1

## CITY OF LAKE FOREST

### AGREEMENT FOR MAINTENANCE SERVICES

#### **PARTIES AND DATE.**

This Agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by and between the City of Lake Forest, a municipal corporation, organized under the laws of the State of California, located at 100 Civic Center Drive, Lake Forest 92630 ("City") and Charles Abbott Associates, Inc., a California Corporation, with its principal place of business at 27201 Puerta Real, Suite 200, Mission Viejo, CA 92691 ("Contractor"). City and Contractor are sometimes individually referred to herein as "Party" and collectively as "Parties."

#### **RECITALS.**

##### **Contractor.**

Contractor desires to perform and assume responsibility for the provision of certain Street Maintenance and Engineering Support Services required by the City which shall be performance in accordance with the terms and conditions set forth in this Agreement and all plans, specifications and other contract documents attached to or incorporated into this Agreement. Contractor represents that it is experienced in providing Street Maintenance and Engineering Support Services to public clients, that it and its employees or subcontractors have all necessary licenses and permits to perform the Services in the State of California, and that it is familiar with the plans of City.

##### **Project.**

City desires to engage Contractor to render such services for the Street Maintenance and Engineering Support Services project ("Project") as set forth in this Agreement.

#### **TERMS.**

##### **Scope of Services and Term.**

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

Term. The term of this Agreement shall be from December 31, 2022 to December 30, 2025, unless earlier terminated as provided herein. The City shall have the unilateral option, at its sole discretion, to renew this Agreement annually for no more than two (2) additional one-year terms. Contractor shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines.

## **Responsibilities of Contractor.**

Independent Contractor; Control and Payment of Subordinates. The Services shall be performed by Contractor or under its supervision. Contractor will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. City retains Contractor on an independent contractor basis and not as an employee. Contractor retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Contractor shall also not be employees of City and shall at all times be under Contractor's exclusive direction and control. Neither City, or any of its officials, officers, directors, employees or agents shall have control over the conduct of Contractor or any of Contractor's officers, employees or agents, except as set forth in this Agreement. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

Schedule of Services. Contractor shall perform the Services expeditiously, within the term of this Agreement, and in accordance with the Schedule of Services set forth in Exhibit "B" attached hereto and incorporated herein by reference. Contractor represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Contractor's conformance with the Schedule, City shall respond to Contractor's submittals in a timely manner. Upon request of City, Contractor shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

Conformance to Applicable Requirements. All work prepared by Contractor shall be subject to the approval of City.

City's Representative. The City hereby designates Thomas Wheeler, Director of Public Works/City Engineer, or his designee, to act as its representative in all matters pertaining to the administration and performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for review and approval of all products submitted by Contractor but not the authority to enlarge the Scope of Work or change the total compensation due to Contractor under this Agreement. The City's City Manager shall be authorized to act on City's behalf and to execute all necessary documents which enlarge the Scope of Work or change the Contractor's total compensation, subject to the provisions contained in Section 3.3 of this Agreement. Contractor shall not accept direction or orders from any person other than the City Manager, City's Representative or his/her designee.

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

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

Standard of Care; Performance of Employees. Contractor shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized

as being employed by contractors and/or professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the discipline necessary to perform the Services. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Contractor shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Contractor's failure to comply with the standard of care provided for herein. Any employee of the Contractor or its sub-contractors who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed from the Project by the Contractor and shall not be re-employed to perform any of the Services or to work on the Project.

Laws and Regulations. Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Services. If the Contractor performs any work knowing it to be contrary to such laws, rules and regulations, Contractor shall be solely responsible for all costs arising therefrom. Contractor shall defend, indemnify and hold City, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

Safety. Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and lifesaving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

#### Labor

Prevailing Wages. Contractor is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. City shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request,

and shall post copies at the Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

Registration. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code sections 1725.5 and 1771.1, Contractor and all subcontractors must be registered with the Department of Industrial Relations ("DIR"). Contractor shall maintain registration for the duration of the project and require the same of any subcontractors. This project may also be subject to compliance monitoring and enforcement by the DIR. It shall be Contractor's sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

It is the intent of the parties to effectuate the requirements of sections 1771, 1774, 1775, 1776, 1777.5, 1813, and 1815 of the Labor Code within this Agreement, and Contractor shall therefore comply with such Labor Code sections to the fullest extent required by law.

Insurance. Contractor agrees to procure and maintain, at Contractor's expense all insurance specified in Exhibit "D" attached hereto and by this reference incorporated herein. Contractor shall require all subcontractors to carry the same policies and limits of insurance that the Contractor is required to maintain, unless otherwise approved in writing by the City.

#### Bonds.

Performance Bond. If specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Agreement a Performance Bond in the amount of the total, not-to-exceed compensation indicated in this Agreement, and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until it has been received and approved by the City.

Payment Bond. If required by law or otherwise specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Agreement a Payment Bond in the amount of the total, not-to-exceed compensation indicated in this Agreement, and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until it has been received and approved by the City.

Bond Provisions. Should, in City's sole opinion, any bond become insufficient or any surety be found to be unsatisfactory, Contractor shall renew or replace the affected bond within 10 days of receiving notice from City. In the event the surety or Contractor intends to reduce or cancel any required bond, at least thirty (30) days prior written notice shall be given to the City, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Agreement until any replacement bonds required by this Section are accepted by the City. To the extent, if any, that the total compensation is increased in accordance with the Agreement, the Contractor shall, upon request of the City, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the City. To the extent available, the bonds shall

further provide that no change or alteration of the Agreement (including, without limitation, an increase in the total compensation, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor, will release the surety. If the Contractor fails to furnish any required bond, the City may terminate this Agreement for cause.

Surety Qualifications. Only bonds executed by an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, shall be accepted. The surety must be a California-admitted surety and satisfactory to the City. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure, and proof of such is provided to the City.

Water Quality Management and Compliance.

Storm Water Management. Storm, surface, ground, nuisance, or other waters may be encountered at various times during the Services. Contractor hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

Compliance with Water Quality Laws, Ordinances and Regulations. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Services including, without limitation, all applicable provisions of the City's ordinances regulating discharges of storm water; the Federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq.*); the California Porter-Cologne Water Quality Control Act (Water Code § 13000 *et seq.*); and any and all regulations, policies, or permits issued pursuant to any such authority. Contractor shall additionally comply with the lawful requirements of the City, and any other municipality, drainage district, or other local agency with jurisdiction over the location where the Services are to be conducted, regarding discharges of storm water to separate storm drain systems or other watercourses, including applicable requirements in municipal storm water management programs.

Compliance with DAMP and LIP. In addition to compliance with the laws, ordinances and regulations listed in paragraph 3.2.13.2, Contractor must comply with all applicable requirements of the Orange County Drainage Area Management Plan ("DAMP") and the City of Lake Forest Local Implementation Plan ("LIP"). Both documents contain Model Maintenance Procedures with Best Management Practices ("BMPs"). These Model Maintenance Procedures contain pollution prevention and source control techniques to minimize the impact of those activities upon dry-weather urban runoff, stormwater runoff, and receiving water quality. Contractor shall be familiar the DAMP, and the LIP and shall comply with the requirements as specified therein.

A copy of the DAMP is available on the internet at:

<http://www.ocwatersheds.com/documents/damp/mapplan>

A copy of the LIP is available on the internet at:

<http://www.lakeforestca.gov/296/Local-Implementation-Plan-LIP>

Standard of Care. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the work assigned to them without impacting water quality in violation of the laws, regulations and policies described in Sections 3.2.13.2 and 3.2.13.3 of this

Agreement. Contractor further warrants that it, its employees and subcontractors will receive adequate training, as determined by the City, regarding the requirements of the laws, regulations and policies described in Sections 3.2.13.2 and 3.2.13.3 of this Agreement as they may relate to the Services.

Liability for Non-compliance.

Indemnity: Failure to comply with laws, regulations, standards and ordinances listed in Sections 3.2.13.2, 3.2.13.3, and 3.2.13.4 of this Agreement is a violation of federal and state law. Notwithstanding any other indemnity contained in this Agreement, Contractor agrees to indemnify and hold harmless the City, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which the City, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the laws, regulations, and ordinances listed in Sections 3.2.13.2, 3.2.13.3, and 3.2.13.4 of this Agreement arising out of or in connection with the Services, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers.

Defense: City reserves the right to defend any enforcement action or civil action brought against the City for Contractor's failure to comply with any applicable water quality law, regulation, or policy. Contractor hereby agrees to be bound by, and to reimburse the City for the costs associated with, any settlement reached between the City and the relevant enforcement entity.

Damages: City may seek damages from Contractor for delay in completing the Services caused by Contractor's failure to comply with the laws, regulations, policies and standards described in Sections 3.2.13.2, 3.2.13.3 and 3.2.13.4 of this Agreement, or any other relevant water quality law, regulation, or policy.

**Fees and Payments.**

Compensation. Contractor shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" attached hereto and incorporated herein by reference. The total compensation shall not exceed FOUR MILLION EIGHT HUNDRED FIFTY THOUSAND FIVE HUNDRED TWENTY-NINE DOLLARS AND FORTY-SIX CENTS (\$4,850,529.46) without written approval of City's City Council or City Manager. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

Payment of Compensation. Contractor shall submit to City a monthly itemized invoice which indicates work completed and hours of Services rendered by Contractor. The invoice shall describe the amount of Services provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the invoice. City shall, within 30 days of receiving such invoice, review the invoice and pay all non-disputed and approved charges thereon. If the City disputes any of Contractor's fees, the City shall give written notice to Contractor within thirty (30) days of receipt of an invoice of any disputed fees set forth therein.

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

Extra Work. At any time during the term of this Agreement, City may request that Contractor perform Extra Work. As used herein, "Extra Work" means any work which is determined by City to be necessary for the proper completion of the Project, but which the parties did not reasonably

anticipate would be necessary at the execution of this Agreement. Contractor shall not perform, nor be compensated for, Extra Work without written authorization from the City.

Rate Increases. In the event that this Agreement is renewed pursuant to Section 3.1.2, the rate set forth in Exhibit "C" may be adjusted each year at the time of renewal as set forth in Exhibit "C."

### **Accounting Records.**

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

### **General Provisions.**

#### Termination of Agreement.

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

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

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

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

Contractor: Charles Abbott Associates, Inc.  
27201 Puerta Real, Suite 200  
Mission Viejo, Ca 92691  
ATTN: Dirk Lovett

City: City of Lake Forest  
100 Civic Center Drive  
Lake Forest, CA 92630  
ATTN: City Clerk

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

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

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

State License Board Notice. Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

Indemnification. To the fullest extent allowable by law, Contractor shall defend, indemnify and hold the City, its officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Contractor, its officials, officers, employees, agents, consultants and contractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of all consequential damages and attorney's fees and other related costs and expenses. Contractor shall defend, at Contractor's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against City, its directors, officials, officers, employees, agents or volunteers. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against City or its officials, officers, employees, agents or volunteers, in any such suit, action or other legal proceeding. Contractor shall reimburse City and its officials, officers, employees, agents and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City, its officials, officers, employees, agents or volunteers.

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

Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Orange County.

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

City's Right to Employ Other Contractors. City reserves right to employ other contractors in connection with this Project.

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

Assignment or Transfer. Contractor shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the City. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

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

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

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

No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

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

Prohibited Interests. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Contractor shall also comply with all relevant provisions of City's Minority Business Enterprise

program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

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

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

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

**Subcontracting.**

Prior Approval Required. Contractor shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of City. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

**CITY OF LAKE FOREST**

**CHARLES ABBOTT ASSOCIATES, INC.**

By: \_\_\_\_\_  
Robert Pequeño  
Mayor

DocuSigned by:  
*Rusty R. Reed*  
By: \_\_\_\_\_  
Rusty R. Reed  
President

[If Corporation, TWO SIGNATURES,  
President **OR** Vice President **AND**  
Secretary **OR** Treasurer **REQUIRED**]

**ATTEST:**

DocuSigned by:  
*Diann Nolte*  
By: \_\_\_\_\_  
Diann Nolte  
Assistant Secretary

By: \_\_\_\_\_  
Lisa Berglund  
City Clerk

**APPROVED AS TO FORM:**

DocuSigned by:  
*Matthew Richardson*  
By: \_\_\_\_\_  
Best Best & Krieger LLP  
City Attorney

**EXHIBIT "A"**  
**SCOPE OF MAINTENANCE SERVICES**

**CITY OF LAKE FOREST**  
**STREET MAINTENANCE SERVICES**  
**SCOPE OF SERVICES**

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**I. WORK DESCRIPTIONS**

The Agency/Firm/Contractor ("Firm") will provide Street Maintenance Services, as determined by the City of Lake Forest by providing full time personnel and through the use of Work Orders, in accordance with this Scope of Services. If upon request of the City, the contractor may be required to provide an independent Quality Assurance Program for work quality control. The units of measurement described herein shall be inclusive of ALL costs including, but not limited to, labor, materials, equipment, markups and profit. Amounts should be shown in annual per year costs.

The services to be provided as shown below are to follow identified job standards, specifications, and industry requirements as shown in the Request for Proposal. Each work task listed below is defined with a reporting unit, a general description, and performance quality requirement. The latest edition of the Standard Specifications for Public Works Construction and/or the Caltrans Standard Specifications, and related Standard Plans and Special Provisions, as solely selected by the City designated representative, as modified by the City designated representative and selected by the City designated representative to be most appropriate for the work, shall govern the work. See Appendix D for general specifications and special provisions.

The Firm is allowed and encouraged to provide suggestions to better enhance the administration of street maintenance services. This RFP provides a framework for providing street maintenance services but can be modified based on a firm's experience. Please explain clearly on a separate document included with your proposal any suggestions or exceptions you have to providing a more efficient and effective delivery of street maintenance services.

1. **Contract Administration** (Units: Annual Lump Sum payable per year in equal monthly increments)

Define Unit: This is a lump sum annual fee payable in equal monthly installments.

This lump sum shall include all costs of mobilization as defined and all other items of work not specifically included in a unit price work task herein including, but not limited to, the services of the point of contact, backup contact staff, emergency contact staff, communications, scheduling services, providing and maintaining a maintenance management system, compliance with all NPDES water quality requirements including Best Management Practices, the cost of insurances, the provision of all aspects of worker and public safety, compliance with all local, state and federal laws, and all other related work.

Quality Requirements: General quality requirements would be to manage, plan, organize, schedule and track work as well as communicate and coordinate with the City of Lake Forest and others routinely while providing status and other requested reports on all work efforts. All work to be to the satisfaction of the City designated representative.

**2A. Public Works General Labor A** (Units: One Person Crew Hours)

Define Units: This is measured by the number of hours taken by a one person crew, including labor, equipment and materials, to complete tasks as assigned by the City designated representative including responding to 24-hour emergency call out services. This activity encompasses providing a one person crew with vehicles, equipment and labor to perform maintenance work or emergency response work for which there is no unit price, as solely designated by the City designated representative.

General labor activity is deemed to include access to an emergency call out person, material and equipment on a 24-hour continuous basis. Any work assigned to Public Works General Labor A is herein defined to be at the proposed hourly rate for any work occurring between 7:00 am and 5:00 pm Monday to Friday. Contractor may propose alternative work schedule and crew staffing levels based on approved weekly work schedule and their work product. Work includes but is not limited to daily arterial highway/residential roadway inspection, litter/debris/illegal dump cleanup, shopping cart removal, illegal sign removal, right-of-way vegetation trimming, minor sidewalk concrete patching, debris removal along the front of catch basin ARS screens, and storm water response/patrolling.

Any work assigned to General Labor A outside of the above-described days and hours shall be compensated at 1.5 times the stated hourly rate. Emergency call outs shall be responsible to respond to the scene of the emergency event within two hours of the first call out contact. Emergency call outs shall be compensated a minimum of two (2) hours of labor for any given call-out.

For Emergency call out purposes only, the responding person shall assess the event, take temporary measures to make the area safe for the public, including but not limited to, temporary traffic control, removal of debris that is blocking travel lanes, bicycle lanes or sidewalks, cutting or removing trees or tree limbs that are blocking travel lanes, bicycle lanes or sidewalks, clearing drainage inlets, filling potholes or other pavement or sidewalk depressions, and supporting Police Services as requested, and identify the remaining work to be performed at a later time during normal business hours. Additional work shall be as approved and designated by the City designated representative.

The number of hours listed on the bid sheet demonstrates the current level of service provided for street maintenance services.

Quality Requirements: The one-person crew has completed the assignment as given in the Task Order or has addressed the safety of the public as the result of an emergency call out and has met the requirements specified. All work to be to the satisfaction of the City designated representative.

**2B. Public Works General Labor B** (Units: Two Person Crew Hours)

Define Units: This is measured by the number of hours taken by a two person crew to complete tasks related to street maintenance services. All tasks included in General Labor A and also included with this item.

This activity encompasses providing a two person crew with vehicles, equipment and labor to perform street maintenance work for which there is no unit price.

The number of hours listed on the bid sheet demonstrates the current level of service provided for street maintenance services.

Quality Requirements: The two-person crew has completed the assignments as given and has met the requirements specified. All work to be to the satisfaction of the City designated representative.

**2C. Public Works General Labor C (Units: Three Person Crew Hours)**

Define Units: This is measured by the number of hours taken by a three person crew to complete tasks related to street maintenance services. All tasks included in General Labor A and also included with this item.

This activity encompasses providing a three person crew with vehicles, equipment and labor to perform street maintenance work for which there is no unit price.

The number of hours listed on the bid sheet demonstrates the current level of service provided for street maintenance services.

Quality Requirements: The three-person crew has completed the assignments as given and has met the requirements specified. All work to be to the satisfaction of the City designated representative.

**2D. Public Works General Labor D (Units: Four Person Crew Hours)**

Define Units: This is measured by the number of hours taken by a four person crew to complete tasks related to street maintenance services. All tasks included in General Labor A and also included with this item.

This activity encompasses providing a four person crew with vehicles, equipment and labor to perform street maintenance work for which there is no unit price.

The number of hours listed on the bid sheet demonstrates the current level of service provided for street maintenance services.

Quality Requirements: The four-person crew has completed the assignments as given and has met the requirements specified. All work to be to the satisfaction of the City designated representative.

**3. Road Maintenance Supervisor (Units: Individual Person Hours)**

Define Units: This is measured by the number of hours taken by a person to supervise completed tasks of the road crews.

This activity encompasses providing a qualified supervisor with vehicle and equipment to be responsible for the general implementation of all services provided by the Contractor. Under the direction of the City designated representative on a regularly scheduled weekly basis, perform a complete city tour to inspect public facilities for deficiencies requiring maintenance and repair; make recommendations for action; oversee and/or perform remedial activities. Facilities to be inspected include but are not limited to, public streets, parks, curb and gutter, sidewalks, roadway

shoulders, catch basin openings and culvert inlets and outlets, traffic signals and road signs. A weekly report of discovered deficiencies shall be provided. Every Friday by noon, a weekly list of proposed activities by the work crews and supervisor shall be submitted for the following week, showing the days for which, each activity is scheduled. Crew size, anticipated man hours and equipment shall be indicated for each activity. Prepare a daily detailed report of work performed by each crew, including list of activities in order of performance, location, detailed description, scope and limits of work, time for each activity. Activity planning for the following day will be included in the report.

Quality Requirements: The road maintenance supervisor has completed daily assignments or has fulfilled requirements for proper reporting to the City. All work to be to the satisfaction of the City designated representative.

**4. Engineering Support (Units: Time and Materials Basis)**

Define Unit: This is measured in the amount of time required to provide engineering support. Contractor shall describe how they can provide this service.

This activity provides as needed engineering design, costing, inspection, construction management, bidding, subcontracting or other services in support of Public Works activities as directed by the City.

Quality Requirements: Engineering Support has completed assignments or has fulfilled requirements as requested by City. All work to be to the satisfaction of the City designated representative. Please include a rate sheet for labor costs associated with engineering support positions.

**5. Tree Pruning 1" to 12" Diameter (Units: Each)**

Define Unit: This is measured by each tree that requires pruning and on an as requested basis. Tree pruning includes trees along arterial streets that block or encroach on City street lights, traffic signals, private property, and signs. It shall be performed in accordance with specifications and following the International Society of Arboriculture (ISA) standards and shall include all costs of legal disposal per specifications. Trees shall be pruned to provide a fourteen (14) foot clearance for branches overhanging beyond curb line into the paved section of roadways and nine (9) foot clearance for pedestrians over the sidewalks. Contractor shall notify the City with tree pruning information stating date of service, GPS locations, and address if applicable. Pruning shall be done by those experienced and skilled in pruning techniques and under the supervision of a certified arborist. Safety and traffic control are the responsibility of the contractor. Contractor shall be responsible for all damages caused by poor procedures. Green waste certification and reports shall be submitted monthly.

**6. Tree Pruning 13" to 30" Diameter (Units: Each)**

Define Unit: This is measured by each tree that requires pruning and on an as requested basis.

Tree pruning includes trees along arterial streets that block or encroach on City street lights, traffic signals, private property, and signs. It shall be performed in accordance with specifications and following the International Society of Arboriculture (ISA) standards and shall include all costs of legal disposal per specifications. Trees shall be pruned to provide a fourteen (14) foot clearance for branches overhanging beyond curb line into the paved section of roadways and nine (9) foot clearance for pedestrians over the sidewalks. Contractor shall notify the City with tree pruning

information stating date of service, GPS locations, and address if applicable. Pruning shall be done by those experienced and skilled in pruning techniques and under the supervision of a certified arborist. Safety and traffic control are the responsibility of the contractor. Contractor shall be responsible for all damages caused by poor procedures. Green waste certification and reports shall be submitted monthly.

**7. Tree Pruning 31" and Above Diameter (Units: Each)**

Define Unit: This is measured by each tree that requires pruning and on an as requested basis.

Tree pruning includes trees along arterial streets that block or encroach on City street lights, traffic signals, private property, and signs. It shall be performed in accordance with specifications and following the International Society of Arboriculture (ISA) standards and shall include all costs of legal disposal per specifications. Trees shall be pruned to provide a fourteen (14) foot clearance for branches overhanging beyond curb line into the paved section of roadways and nine (9) foot clearance for pedestrians over the sidewalks. Contractor shall notify the City with tree pruning information stating date of service, GPS locations, and address if applicable. Pruning shall be done by those experienced and skilled in pruning techniques and under the supervision of a certified arborist. Safety and traffic control are the responsibility of the contractor. Contractor shall be responsible for all damages caused by poor procedures. Green waste certification and reports shall be submitted monthly.

**8. Tree Removal 1" to 12" Diameter (Units: Each)**

Define Unit: This is measured by each tree that requires removal and on an as requested basis.

Tree removal shall include complete removal of trees and grinding of stumps to 12 inches below finish grade. All shavings need to be removed and the hole shall be filled back to the surrounding grade with clean soil and compacted. The tree diameter (DBH) will be measured at breast height. Restoration of work area shall include removal of wood chips, shavings, irrigation repairs, drainage repairs, backfill of finish grade with topsoil, reseeding and seed cover. Contractor shall notify the City with tree removals information stating date of service, GPS locations, and address if applicable. Contractor shall be responsible for all damages caused by poor procedures. Green waste certification and reports shall be submitted monthly.

**9. Tree Removal 13" to 30" Diameter (Units: Each)**

Define Unit: This is measured by each tree that requires removal and on an as requested basis.

Tree removal shall include complete removal of trees and grinding of stumps to 12 inches below finish grade. All shavings need to be removed and the hole shall be filled back to the surrounding grade with clean soil and compacted. The tree diameter (DBH) will be measured at breast height. Restoration of work area shall include removal of wood chips, shavings, irrigation repairs, drainage repairs, backfill of finish grade with topsoil, reseeding and seed cover. Contractor shall notify the City with tree removals information stating date of service, GPS locations, and address if applicable. Contractor shall be responsible for all damages caused by poor procedures. Green waste certification and reports shall be submitted monthly.

**10. Tree Removal 31" and Above Diameter (Units: Each)**

Define Unit: This is measured by each tree that requires removal and on an as requested basis.

Tree removal shall include complete removal of trees and grinding of stumps to 12 inches below finish grade. All shavings need to be removed and the hole shall be filled back to the surrounding grade with clean soil and compacted. The tree diameter (DBH) will be measured at breast height. Restoration of work area shall include removal of wood chips, shavings, irrigation repairs, drainage repairs, backfill of finish grade with topsoil, reseeding and seed cover. Contractor shall notify the City with tree removals information stating date of service, GPS locations, and address if applicable. Contractor shall be responsible for all damages caused by poor procedures. Green waste certification and reports shall be submitted monthly.

**11. Spray pre-emergent herbicide (RD Shldr) (Units: Square Feet)**

Define Unit: This is measured by square foot and is performed once per year.

Work under this section shall include non-glyphosate herbicide spraying, areas along the public right-of-way strips and other city owned properties per manufacture's recommendations. Spraying shall be performed in accordance with established Herbicide Application Recommendations. All chemical applications shall be performed by a license pesticide applicator and all pesticide regulations and reporting in accordance with the State of California Agriculture Department shall be follow. Copies of Restrictive Materials permits, spraying recommendations, chemical labels and MSDS sheets shall be provided to the City in digital format and hard copies. All chemical usage report shall be submitted to the City at least monthly.

**12. Spray pre/post-emergent herbicide (Curb & Gutter) (Units: Linear Feet)**

Define Unit: This is measured by linear feet and performed citywide twice a year in full following a monthly arterial treatment schedule.

Work under this section shall include non-glyphosate herbicide spraying along arterial curb and gutter areas of the public right-of-way strips, center medians, and other city owned properties per manufacture's recommendations. Spraying shall be performed in accordance with established Herbicide Application Recommendations. All chemical applications shall be performed by a license pesticide applicator and all pesticide regulations and reporting in accordance with the State of California Agriculture Department shall be follow. Copies of Restrictive Materials permits, spraying recommendations, chemical labels and MSDS sheets shall be provided to the City in digital format and hard copies. All chemical usage report shall be submitted to the City at least monthly.

**13. Remove and Replace 4" AC (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

This activity encompasses the saw cutting, removal of AC and subgrade to provide for up to a full 4-inch section, compaction of disturbed subgrade, grinding, tack coating of the vertical edge surfaces with 2 coats of SS-1h spray applied at a uniform rate of 0.1 gallons per square yard each coat (first coat to be allowed to stiffen before second coat), placement of 2-inches of PG 64-10 Type 3 B3 AC for base and a 2-inch final lift of PG 64-10 Type 3 C3 AC, and compaction

of each individual lift with a vibratory 3 foot wide minimum roller. Minimum repair width will be 6 feet by 6 feet.

**14. Remove and Replace 6" AC (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

Work under this subsection shall include saw cutting, removal of AC and subgrade to provide for up to a full 6-inch section, compaction of disturbed subgrade, grinding, tack coating of the vertical edge surfaces with 2 coats of SS-1h spray applied at a uniform rate of 0.1 gallons per square yard each coat (first coat to be allowed to stiffen before second coat), placement of PG 64-10 Type 3 B3 AC for base up to 4-inches and a 2 inch final lift of PG 64-10 Type 3 C3 AC, and compaction of each individual lift with a vibratory 3 foot wide minimum roller. Minimum repair width will be 6 feet by 6 feet.

**15. Remove and Replace 8" AC (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

Work under this subsection shall include saw cutting, removal of AC and subgrade to provide for up to a full 8-inch section, compaction of disturbed subgrade, grinding, tack coating of the vertical edge surfaces with 2 coats of SS-1h spray applied at a uniform rate of 0.1 gallons per square yard each coat (first coat to be allowed to stiffen before second coat), placement of PG 64-10 Type 3 B3 AC for base up to 6-inches in two lifts and a 2 inch final lift of PG 64-10 Type 3 C3 AC, and compaction of each individual lift with a vibratory 3 foot wide minimum roller. Minimum repair width will be 6 feet by 6 feet.

**16. Remove and Replace 10" AC (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

Work under this subsection shall include saw cutting, removal of AC and subgrade to provide for up to a full 10-inch section, compaction of disturbed subgrade, grinding, tack coating of the vertical edge surfaces with 2 coats of SS-1h spray applied at a uniform rate of 0.1 gallons per square yard each coat (first coat to be allowed to stiffen before second coat), placement of PG 64-10 Type 3 B3 AC for base and a final 2 inch final coat of PG 64-10 Type 3 C3, up to 10-inches AC in three lifts, and compaction with a vibratory 3 foot wide minimum roller. Minimum repair width will be 6 feet by 6 feet.

**17. Remove and Replace 12" AC (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

Work under this subsection shall include saw cutting, removal of AC and subgrade to provide for up to a full 12-inch section, compaction of disturbed subgrade, grinding, tack coating of the vertical edge surfaces with 2 coats of SS-1h spray applied at a uniform rate of 0.1 gallons per square yard each coat (first coat to be allowed to stiffen before second coat), placement of PG 64-10 Type 3 B3 AC for base up to 10-inches in 3 lifts and a 2 inch final lift of PG 64-10 Type 3

C3 AC, and compaction of each individual lift with a vibratory 3 foot wide minimum roller. Minimum repair width will be 6 feet by 6 feet.

**18. AC Berm – Type D2 6” (Units: Linear Feet)**

Define Unit: This is measured by the amount asphalt concrete in linear feet that is used to repair berms. This will be performed on an as requested basis.

Work under this subsection shall include saw cutting, removal of AC Berm as directed by the Inspector, compacting disturbed subgrade, forming and placement of PG 64-10 Type 3 B3 AC for new berm.

**19. AC Berm – Type D2 8” (Units: Linear Feet)**

Define Unit: This is measured by the amount asphalt concrete in linear feet that is used to repair streets. This will be performed on an as requested basis.

Work under this subsection shall include saw cutting, removal of AC Berm as directed by the Inspector, compacting disturbed subgrade, forming and placement of PG 64-10 Type 3 B3 AC for new berm.

**20. AC Crack Repair Cleaning & Filling (Units: Time and Material)**

Define Unit: This is measured by the amount of crack sealant that is used to repair pavement cracks in the roadway. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This is the operation of applying joint filler into pavement cracks to prevent and protect the pavement from decay. All cracks that are 1/8 inch in width or larger shall be routed, blown clean with a hot air lance and filled with hot asphalt-rubber sealant material. Wide cracks should be filled with patch material. Prior to the application of hot asphalt-rubber sealant, joints and cracks shall be routed and cleaned to remove dust, dirt, moisture, and foreign material or old sealant. Cracks shall be sealed from the bottom up. Sealant material shall be applied so it is flush with the surface. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishing proper traffic control, router all cracks greater than 1/8", clean crack using compressed air, apply crack seal so there is a smooth finish, restore any affected pavement legends or striping, and then clean the work site. Pavement filling shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the pavement filling and refill any depressed filled cracks to the City's satisfaction.

Quality Requirements: At the end of the work session, a level surface will be achieved, cracks shall be filled to prevent moisture from the sub base, the work site cleaned, debris removed, cracks repaired pursuant to proper standards and specifications and traffic control restored. All work to be to the satisfaction of the City designated representative.

**21. Cold Patch of AC Pavement – Temporary (Units: Square Feet)**

Define Unit: This is measured by the amount of Asphalt Concrete potholes patched in square feet, regardless of depth. The surface area will be measured by square feet. The payment shall be for

the square feet of pavement patched, regardless of the final depth. This will be performed on an as needed basis.

This activity encompasses hand patching of potholes, small depressions, and edge breaks in roadway surfaces to provide a smooth driving surface. This activity is performed in order to temporarily prevent further deterioration of the pavement. This will include, but is not limited to, various subtasks for proper planning and performing the work including clearing and grubbing, drying the area to be patched, patching depressions or minor cracking and cleaning the site. Temporary cold patch shall be guaranteed to perform satisfactorily for up to six (6) months. During the guarantee period, the Firm shall bear all costs to maintain the temporary cold patch to the City's satisfaction.

**Quality Requirements:** At the end of the work session, proper compaction will be attained, with the temp AC a minimum of 1/8 inch and a maximum of 1/4 inch above existing AC, and all the loose debris removed from the work area. The patch area shall have a service life for a minimum of six months, or the deficient area must be repaired at no cost to the City. All work to be to the satisfaction of the City designated representative. Pothole location, before/after pictures, and final measurements will be uploaded into the City's GIS inventory software by contractor.

## **22. Patch of AC Pavement – Permanent (Units: Square Feet)**

**Define Unit:** This is measured by the amount of potholes patched in square feet. The surface area will be measured by square feet. The payment shall be for the square feet of pavement patched, regardless of the depth. This will be performed on an as requested basis.

This activity encompasses minor permanent patching of potholes, depressions, and edge breaks in roadway surfaces using Flomix, Aquaphalt, or other City approved hot mix asphalt concrete to provide a smooth driving surface per manufacturer's recommendations. This includes clearing and grubbing, sawcutting, excavation, hand patching and minor skin patching of potholes, small depressions, and edge breaks in roadway surfaces to provide a smooth driving surface. This is performed to prevent further deterioration of pavement. This will include, but is not limited to, various subtasks for proper planning and performing the work including patching depressions or deteriorated pavement. Permanent pothole patching shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the permanent pothole patching to the City's satisfaction.

**Quality Requirement:** At the end of the work session, proper compaction will be attained, all the loose debris removed from the work area, and the permanent patch installed to a sawcut joint. The patch area shall have a service life for a minimum of 12 months and any deficient area must be repaired at no cost to the City by the Firm. All work to be to the satisfaction of the City designated representative. Pothole location, before/after pictures, and final measurements will be uploaded into the City's GIS inventory software.

## **23. AC Cold Plane/Milling up to 2" (Units: Square Feet)**

**Define Unit:** This is measured by the amount of asphalt concrete area in square feet that is cold planed in preparation of an Asphalt Concrete Hot Mix Overlay. The surface area will be measured in square feet. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This item shall consist of traffic control, clearing and grubbing, cold planing/milling of up to 2" of existing asphalt concrete surfacing, removal of debris, traffic control, street sweeping

and the temporary replacement of removed striping by repainting of replacement striping. Limits of the pavement removal will be marked by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, performing cold planing/milling of the designated pavement area, removal of the existing asphalt concrete, cleaning the site by street sweeping and temporary repainting of existing pavement markings and striping (tabs not accepted) and clean the work site. Asphalt concrete shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the asphalt concrete to the City's satisfaction.

Quality Requirement: At the end of each work session, the cold planed asphalt concrete shall be removed and be ready to accept an asphalt concrete hot mix overlay pursuant to the specifications above, a level surface will be achieved, the work site cleaned, all debris removed, and traffic control restored. All work to be to the satisfaction of the City designated representative.

#### **24. AC Hot Mix 2" Overlay (Units: Tons)**

Define Unit: This is measured by the amount of asphalt concrete area in net tons that is to be placed. The tonnage will be measured by certified weigh tickets. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This item shall consist of cleaning of the limits of the area to receive the AC overlay, clearing and grubbing, routing, cleaning and sealing all cracks, placement of the Asphalt Concrete Hot Mix overlay, compacting the overlay to 95% relative compaction, providing traffic control and repainting all markings, legends and striping, installing raised pavement markers and cleaning the site. Limits of the pavement overlay will be marked by the City designated representative. The pavement edge joins and match lines shall be neatly and cleanly made. A tack coat of grade SS-1h emulsified asphalt shall be applied to all surfaces prior to placement of new AC, with the exception that tack coat is not required to be applied to aggregate base surfaces. The Firm shall submit, upon request, the Asphalt Concrete Mix Design in accordance with City Standard for PG 64-10 Type 3 C3 AC as required to construct the 2" final lift. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited, to various subtasks for proper planning and performing the work including contacting Underground Service Alert (USA), establishment of proper traffic control, performing saw cutting of the designated pavement area (if any), placement of the asphalt concrete overlay by a fully operational self-propelled paving machine, compact the overlay to 95% relative compaction, restore existing pavement markings with roadway striping, clean the work site and remove USA markings. The cost to restore final striping and painting of legends and markings shall be paid under that specific work activity. Asphalt concrete overlay shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain or restore the asphalt concrete to the City's satisfaction.

Quality Requirement: At the end of each work session, AC overlay shall be placed pursuant to the specifications above, a level surface will be achieved with no more than a 1/8" variation in ten linear feet as solely determined by the City designated representative, the work site cleaned, debris removed, and traffic control restored. All work to be to the satisfaction of the City designated representative.

#### **25. Pave A.C. Slot in 3 Working Days 4" (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

This activity encompasses the saw cutting and removal and replacement of existing 4-inch AC pavement and subgrade as necessary to provide for the installation of concrete. AC installation shall be in accordance with AC remove and replace bid item. Work shall be performed to the extent that the area of work is returned to a safe condition for the public with public access reestablished as much as reasonably possible. Final repair shall include 2-inch grinding of repair area plus the existing adjoining AC, 2 feet beyond the saw cut and a 2-inch final lift of PG 64-10 Type 3 C3 AC.

**26. Pave A.C. Slot in 3 Working Days 6" (Units: Square Feet)**

Define Unit: This is measured by the amount asphalt concrete in square feet that is used to repair streets. This will be performed on an as requested basis.

This activity encompasses the saw cutting and removal and replacement of existing 6-inch AC pavement and subgrade as necessary to provide for the installation of concrete. AC installation shall be in accordance with AC remove and replace bid item. Work shall be performed to the extent that the area of work is returned to a safe condition for the public with public access reestablished as much as reasonably possible. Final repair shall include 2-inch grinding of repair area plus the existing adjoining AC, 2 feet beyond the saw cut and a 2-inch final lift of PG 64-10 Type 3 C3 AC.

**27. Remove and Replace 4-Inch Sidewalk (Units: Square Feet)**

Define Unit: This is measured by the amount of sidewalk area in square feet that is to be removed and replaced. The surface area will be measured in square feet. The sidewalk depth shall be 4" nominal. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the repair of sidewalks by replacement of damaged or deteriorated sections. This is performed to provide a level transition from slab to slab. This is also done to repair sidewalks that have been raised or lowered and the movement of pedestrians is impaired as determined by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert (USA), clearing and grubbing, compaction of disturbed subgrade, root removal, establishment of proper traffic control, provide an alternate pathway for pedestrians, saw cutting the proposed removal section from joint to joint, the removal of the full section of concrete, pouring of new concrete with a 560-C-3250 concrete with Type V cement to meet ADA standards, repairs of any impacted irrigation, cleaning the work area and removing USA markings. If tree roots might interfere or have caused damage to sidewalk and will require restoration work, the City's Landscape Inspector must be notified. Therefore, tree roots will need to be evaluated as part of the restoration work being performed. An ISA Certified Arborist will need to provide a report as to the advantages, disadvantages of tree root shaving, pruning and/or removal. This report will also need to include the health status and safety of the remaining tree after the work has been done. If the adjacent tree needs to be removed after all other measures have been exhausted and because most of or all of the supporting roots need to be removed, and the City agrees, then

the tree removal pricing shall be used. Sidewalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the sidewalk to the City's satisfaction.

Quality Requirements: At the end of the work session, the sidewalk will be repaired following standards and regulations so that it blends with adjacent sidewalk and curbs, the work site is cleaned, and debris removed. All work to be to the satisfaction of the City designated representative.

#### **28. Remove and Replace 6-Inch Sidewalk (Units: Square Feet)**

Define Unit: This is measured by the amount of sidewalk area in square feet that is to be removed and replaced. The surface area will be measured in square feet. The sidewalk depth shall be 6" nominal. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the repair of sidewalks by replacement of damaged or deteriorated sections. This is performed to provide a level transition from slab to slab. This is also done to repair sidewalks that have been raised or lowered and the movement of pedestrians is impaired as determined by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert (USA), clearing and grubbing, compaction of disturbed subgrade, root removal, establishment of proper traffic control, provide an alternate pathway for pedestrians, saw cutting the proposed removal section from joint to joint, the removal of the full section of concrete, pouring of new concrete with a 560-C-3250 concrete with Type V cement to meet ADA standards, repairs of any impacted irrigation, cleaning the work area and removing USA markings. If tree roots might interfere or have caused damage to sidewalk and will require restoration work the City's Landscape Inspector must be notified. Therefore, tree roots will need to be evaluated as part of the restoration work being performed. An ISA Certified Arborist will need to provide a report as to the advantages, disadvantages of tree root shaving, pruning and/or removal. This report will also need to include the health status and safety of the remaining tree after the work has been done. If the adjacent tree needs to be removed after all other measures have been exhausted and because most of or all of the supporting roots need to be removed, and the City agrees, then the tree removal pricing shall be used. Sidewalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the sidewalk to the City's satisfaction.

Quality Requirements: At the end of the work session, the sidewalk will be repaired following standards and regulations so that it blends with adjacent sidewalk and curbs, the work site is cleaned, and debris removed. All work to be to the satisfaction of the City designated representative.

#### **29. Remove and Replace Curb & Gutter (Units: Linear Feet)**

Define Unit: This is measured by the amount of curb and gutter removed and installed in linear feet. The surface length will be measured in linear feet. The height of the curb may variously be 6", 8", or the height to match the existing curb height with no change in compensation. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the repair of damaged or deteriorated concrete curb and gutter to ensure proper drainage flow including forms and concrete work. AC Slot Repair will be paid for under bid items 25 and 26. As directed, remove curb and gutter when sections are damaged, raised or lowered, and water flow is impaired or diverted. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert (USA), establishment of proper traffic control, saw cutting all joints, removing the concrete and asphalt concrete, root removal, compaction of disturbed subgrade, setting forms, pouring and finishing the curb and gutter, concrete to be 560-C-3250 with Type V cement, repaving the asphalt concrete, flow checking the gutter, cleaning the work site, and removal of USA markings. Tree roots might interfere or have caused damage to curb and gutter and will require restoration work. Therefore, tree roots will need to be evaluated as part of the restoration work being performed. The City's ISA Certified Arborist/Landscape Inspectors will be available at the request of the contractor to provide a report as to the advantages, disadvantages of tree roots shaving, pruning and/or removal. This report will include the health status and safety of the remaining tree after the work has been done. If the adjacent tree needs to be removed after all other measures have been exhausted and because most of or all of the supporting roots need to be removed, and the City agrees, then the tree removal pricing shall be used. Curb and gutter shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the curb and gutter to the City's satisfaction.

Quality Requirements: At the end of the work session, level surfaces will be achieved, drainage lines properly established, the work site cleaned, debris removed, curbs and gutters installed pursuant to proper standards and specifications and traffic control restored. All work to be to the satisfaction of the City designated representative.

### **30. Repair Drive Approach (Units: Square Feet)**

Define Unit: This is measured by the amount of drive approach area in square feet that is to be removed and replaced. The surface area will be measured in square feet. The thickness of drive approaches shall be 6" or greater to match existing. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the removal and replacement of driveways to replace damaged or deteriorated sections. This is performed to provide for level transition from the driveway to the street. This includes clearing and grubbing, removal operations including the adjacent curb and gutter and one foot width of asphalt concrete by the length of the curb and placement of the new concrete and AC. This service is provided when a driveway has been damaged, and movement of users is impaired, as determined by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert, establishment of proper traffic control, performing saw cutting of the designated pavement area, removing the concrete and asphalt concrete, root removal, compaction of disturbed subgrade, placement of designated concrete driveway, placement of adjacent curb and gutter and asphalt concrete, setting forms, pouring and finishing the driveway and curb and gutter, concrete to be 560-C-3250 with Type V cement, re-pavement of the asphalt concrete meeting AC Slot Repair specifications, flow checking the gutter, cleaning the work site and removal of USA markings. Drive approach shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period,

the Firm shall bear all costs to maintain the drive approach to the City's satisfaction.

Quality Requirements: At the end of the work session, level surfaces will be achieved, gutter flow checked, the work site cleaned, debris removed, drive approach replaced pursuant to proper standards and specifications, and traffic control restored. All work to be to the satisfaction of the City designated representative.

**31. Repair Access Ramp** (Units: Each)

Define Unit: This is measured by the completion of each access ramp removed and replaced. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the removal and replacement of deteriorated ramps as directed by the City designated representative. The repair of access ramps shall meet Americans with Disability Act (ADA) standards and Caltrans Standard Plans and is performed on an as needed basis when requested by the City. This includes clearing and grubbing, the removal of the adjacent curbs and gutters including a one-foot width of asphalt concrete along the length of the curb and adjacent sidewalk as necessary to meet grade and placement of the new concrete and AC. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert, establishment of proper traffic control, performing saw cutting of the designated pavement and concrete areas, removal of concrete and adjacent curb and gutter, removal and replacement of the asphalt concrete and sidewalk, setting forms, pouring and finishing the necessary ramp, placement of a cast-in-place Armor-tile Onyx Black Truncated Dome Panel including pouring adjacent sidewalk as necessary to meet grade, pouring curb and gutter, concrete to be 560-C-3250 with Type V cement, repaving the asphalt concrete, flow checking the gutter, cleaning the work site and removal of USA markings. The access ramp shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the access ramp to the City's satisfaction.

Quality Requirements: At the end of the work session, a tapered ramp is achieved, adjacent sidewalks are level, the gutter is flow checked, the work site is cleaned, removing all debris, and the access ramp is replaced pursuant to proper standards and specifications. All work to be to the satisfaction of the City designated representative.

**32. Sidewalk Inspection Program** (Units: Crew Hours)

Define Unit: This is measured by the number of hours needed for sidewalk repair inspections including all labor, equipment, and materials to perform the work as defined.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the necessary one-man crew, vehicle, and equipment necessary to inspect and report displacements on City sidewalks to minimize the possibility of injury to pedestrians. The activity is intended to prevent trip and fall incidents due to the deterioration of aging sidewalks, expansion of roots, and ground settlements. Data collection for this activity will follow the City's Sidewalk Inspection and Maintenance Procedure No. 29. See Appendix F.

High traffic/arterial work is to be completed on an annual basis and encompasses approximately 78 miles of high traffic sidewalks. Low traffic/residential work is to be completed every 3 years and encompasses approximately 210 miles of sidewalk. All sidewalk locations with a displacement of  $\frac{3}{4}$  inch or greater shall be spray painted for identification for future repairs and to identify the potential risk of injury. Paint shall be reapplied every 90 days until temporary or permanent repairs have been made. Photographs will also be taken for each location where the vertical displacement is  $\frac{1}{2}$  inch or greater. Data collection will be done in the field using the ESRI ArcGIS Collector application for tablets/smart phones or a third-party software program. If third party software is used, the information will be converted back to ArcGIS shapefile format for the City's usage. The Firm will be responsible for providing data that is compatible with the City's existing XY-Maps GIS-based system.

Quality Requirement: At the end of each work session, sidewalks within inspection areas are inspected, and displacements are identified and photographed to create an inventory of all sidewalk displacements requiring repair.

### **33. Sidewalk Grinding (Units: Linear Feet)**

Define Unit: This is measured by linear feet for the completion of each sidewalk grinding location. This will be performed on an as requested basis.

This activity encompasses the grinding of concrete sidewalks to provide a smooth surface free of edge displacement. This activity is performed on uneven, displaced sidewalks, as designated by the City designated representative. The Firm may also be issued a directive to perform sidewalk grinding in a designated neighborhood including fully documenting each location of grinding, before and after grinding is performed in the ESRI ArcGIS Collector application used for the sidewalk inspection program, to the satisfaction of the City designated representative. The job and work must follow identified job standards, specifications, City sidewalk maintenance procedures, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including clearing and grubbing, establishment of proper traffic control, grinding of concrete sidewalk or other concrete areas by mechanical means ranging in width, dust collection, and cleaning the work site. Sidewalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the sidewalk to the City's satisfaction.

Quality Requirements: At the end of the work session, the sidewalk will be repaired following standards and regulations so that it blends with adjacent sidewalk and curbs, the work site is cleaned, and debris removed. All work to be to the satisfaction of the City designated representative.

### **34. Sidewalk Ramping (Units: Linear Feet)**

Define Unit: This is measured by linear feet for the completion of the placement of temporary ramping materials across a section of displaced sidewalk panel. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the ramping (asphalt concrete, concrete, epoxy or other acceptable material) of concrete sidewalks to provide a smooth surface free of edge displacement. This activity is performed on uneven, displaced sidewalks when grinding is not achievable, as designated by the City designated representative. The Firm must fully document each location of ramping, before and after ramping is performed in the ESRI ArcGIS Collector application used for the sidewalk inspection program, to the satisfaction of the City designated representative. The job and work must follow identified job standards, specifications, City sidewalk maintenance procedures, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including clearing and grubbing, establishment of proper traffic control and cleaning the work site. Sidewalk shall be guaranteed to perform satisfactorily for up to twelve (12) months.

Quality Requirements: At the end of the work session, the sidewalk will be repaired following standards and regulations so that it blends with adjacent sidewalk and curbs, the work site is cleaned, and debris removed. All work to be to the satisfaction of the City designated representative.

### **35. Citywide White Striping (Units: Linear Feet Per Coat)**

Define Unit: This is measured by linear feet for painting of all existing traffic lane lines on streets in the city. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to fully evaluate the quantity of work and meet the quality requirement. This activity encompasses painting traffic lines to provide defined travel lanes and proper vehicle guidance. This includes annual school zone restriping during the month of August, once per contract restriping of all existing citywide white painted stripes regardless of type or location, and the placement of new striping as designated by the City designated representative. It is the Firm's sole responsibility to understand the scope of the work and the quantity of work to be done. The compensation for linear feet for white paint striping is deemed to include all existing white striping on city streets.

Striping shall occur on an as requested basis on an agreed schedule. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting of all white lane striping citywide with approved paint materials and approved paint thickness. Repainting of existing painting shall be done in one coat. Painting new striping shall be done with two coats of paint which application shall be separated by seven calendar days. Arterial, collector, and residential streets shall be painted during daytime work hours, unless otherwise specified by City designated representative.

The Firm shall submit to the City designated representative certified copies of the manufacturer's test reports and Material Safety Data Sheet (MSDS) showing conformance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in no more than 3 minutes when

preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. All striping shall be reflectorized. Striping shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the striping, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

### **36. Citywide Yellow Striping (Units: Linear Feet Per Coat)**

Define Unit: This is measured in linear feet for painting of all existing traffic lane lines on streets in the city. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to fully evaluate the quantity of work and meet the quality requirement. This activity encompasses painting yellow traffic lines to provide defined travel lanes and proper vehicle guidance. This includes annual school zone restriping during the month of August, once per contract restriping of all existing citywide yellow painted stripes regardless of type or location, and the placement of new striping as designated by the City designated representative. It is the Firm's sole responsibility to understand the scope of the work and the quantity of work to be done. The compensation for linear feet for yellow paint striping is deemed to include all existing striping on every city street.

Striping shall occur on an as requested basis on an agreed schedule. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting of all yellow lane striping citywide with approved paint materials and approved paint thickness. Repainting of existing painting shall be done in one coat. Painting new striping shall be done with two coats of paint which application shall be separated by seven calendar days. A three-inch black stripe shall be painted between all double yellow striping. Arterial, collector, and residential streets shall be painted during daytime work hours, unless otherwise specified by City designated representative.

The Firm shall submit to the City designated representative certified copies of the manufacturer's test reports and Material Safety Data Sheet (MSDS) showing conformance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. Yellow and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in no more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All striping shall be reflectorized. Striping shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the striping, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to

be to the satisfaction of the City designated representative.

**37. Stop Bars, Diagonal Markings, and Chevrons (Units: Linear Feet)**

Define Unit: This is measured by the amount of stop bars, diagonal markings, and chevrons painted in linear feet for traffic markings. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the preparation, installation, or refurbishing of white and yellow stop bars, diagonal markings, and chevrons on the traveled portion of the highway to provide defined markings for vehicle and pedestrian control. This includes the annual school zone restriping during the month of August, once per contract restriping of existing citywide stop bars, diagonal markings, and chevrons, and as designated by the City designated representative. This activity is for stop bars, diagonal markings, and chevrons only; crosswalks and standard markings are covered under separate activities. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all white stop bars, diagonal markings, and chevrons citywide with approved paint materials and approved paint thickness. Repainting shall be done in one coat. New painting of stop bars, diagonal markings, and chevrons shall be done with two coats of paint which application shall be separated by seven calendar days. All paint shall be reflectorized.

The Firm shall submit certified copies of the manufacturer's test reports and MSDS in accordance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White, yellow, and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. Work on Arterial Highways shall be performed during nighttime work hours. Work on collector and residential streets shall be performed during daytime work hours. Stop bars and chevrons shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the painted areas, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

**38. Thermoplastic Stop Bars, Diagonal Markings, and Chevrons (Units: Linear Feet)**

Define Unit: This is measured by the amount of thermoplastic stop bars, diagonal markings, and chevrons completed in linear feet for traffic markings. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement in accordance with Caltrans Standard Specifications Section 84. This activity

encompasses the preparation, installation, or refurbishing of white and yellow stop bars, diagonal markings, and chevrons on the traveled portion of the highway to provide defined markings for vehicle and pedestrian control, and as designated by the City designated representative. This activity is for stop bars and chevrons only; crosswalks and standard markings are covered under separate activities. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, installation of primer base coat, and glass bead reflectorizing of crosswalks citywide with approved materials and approved thickness. Installation on Arterial Highways shall be performed during nighttime work hours. Installation on collector and residential streets shall be performed during daytime work hours. Crosswalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the crosswalk, including repair as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

### **39. White Crosswalks (Units: Linear Feet)**

Define Unit: This is measured by the amount of white crosswalk length in linear feet for traffic markings. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses painting or refurbishing crosswalks on the traveled portion of the highway to provide defined markings for vehicle and pedestrian control. This includes the once per contract repainting of existing citywide crosswalks and as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all white crosswalks citywide on an as requested basis with approved paint materials and approved paint thickness. All painting shall be reflectorized. Repainting shall be done in one coat. New painting of crosswalks shall be done with two coats of paint and application shall be separated by seven calendar days.

The Firm shall submit certified copies of the manufacturer's test reports and MSDS in accordance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White, yellow, and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. Work on Arterial Highways shall be performed during nighttime work hours. Work on collector and residential streets shall be performed during daytime work hours. Crosswalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the crosswalk, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

**40. Yellow Crosswalks (Units: Linear Feet)**

Define Unit: This is measured by the amount of yellow school crosswalk length in linear feet for traffic markings. This will be performed on an annual basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses painting yellow crosswalks on the traveled portions of the highway to provide defined markings for vehicle and pedestrian control. This includes the annual repainting of existing citywide school crosswalks during the month of August, and as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all yellow school crosswalks citywide with approved paint materials and approved paint thickness. Repainting shall be done in one coat. New painting of yellow crosswalks shall be done with two coats of paint which application shall be separated by seven calendar days. All painting shall be reflectorized.

The Firm shall submit certified copies of the manufacturer's test reports and MSDS in accordance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White, yellow, and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. Painting on Arterial Highways shall be performed during nighttime work hours. Painting on collector and residential streets shall be performed during daytime work hours. Crosswalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the crosswalk, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

**41. Thermoplastic Crosswalks (Units: Linear Feet)**

Define Unit: This is measured by the amount of crosswalk length completed in linear feet for traffic markings. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement in accordance with Caltrans Standard Specifications Section 84. This activity encompasses the preparation, installation, or refurbishing of white and yellow crosswalks on the traveled portion of the highway to provide defined markings for vehicle and pedestrian control, and as designated by the City designated representative. The job and work must follow identified

job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, installation of primer base coat, and glass bead reflectorizing of crosswalks citywide with approved materials and approved thickness. Installation on Arterial Highways shall be performed during nighttime work hours. Installation on collector and residential streets shall be performed during daytime work hours. Crosswalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the crosswalk, including repair as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **42. Ladder Crosswalks (Units: Linear Feet)**

Define Unit: This is measured by the amount of 12" solid paint by the linear feet of 12" solid paint included in a ladder crosswalk.

This activity encompasses the preparation, painting or refurbishing of white and yellow crosswalks on the traveled portion of the road way to provide defined markings for vehicle and pedestrian control. This includes the annual school zone restriping during the month of August, once per contract repainting of existing citywide crosswalks, and as designated by the City designated representative. Markings are to comply with CalTrans standards and specifications.

The Firm shall submit certified copies of the manufacturer's test reports and MSDS in accordance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White, yellow, and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. Painting on Arterial Highways shall be performed during nighttime work hours. Painting on collector and residential streets shall be performed during daytime work hours. Crosswalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the crosswalk, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **43. Thermoplastic Ladder Crosswalks (Units: Linear Feet)**

Define Unit: This is measured by the amount of 12" solid thermoplastic by the linear feet of 12" solid thermoplastic included in a ladder crosswalk.

This activity is generally described, but it is the Firm's responsibility to meet the quality

requirement in accordance with Caltrans Standard Specifications Section 84. This activity encompasses the preparation, installation, or refurbishing of white and yellow crosswalks on the traveled portion of the highway to provide defined markings for vehicle and pedestrian control, and as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, installation of primer base coat, and glass bead reflectorizing of crosswalks citywide with approved materials and approved thickness. Installation on Arterial Highways shall be performed during nighttime work hours. Installation on collector and residential streets shall be performed during daytime work hours. Crosswalk shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the crosswalk, including repair as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **44. Paint Yellow Standard Legends (Units: Each Letter)**

Define Unit: This is measured by the completion of each yellow standard legend painted. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses painting yellow traffic markings on the traveled portion of the highway to provide defined markings for vehicle and pedestrian control. This includes the annual school zone restriping during the month of August, once per contract repainting of all yellow standard legends, and as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. All painting of legends shall meet the size and shape of existing City legends. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all yellow standard legends citywide with approved paint materials and approved paint thickness. Repainting of existing legends shall be in one coat. New painting of yellow standard legends shall be done with two coats of paint which application shall be separated by seven calendar days. All paint shall be reflectorized. A legend is defined as a whole word paid by each letter such as "Slow," "School," or "Xing," regardless of the number of letters painted.

The Firm shall submit certified copies of the manufacturer's test reports and MSDS in Accordance with the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White, yellow, and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. Painting on Arterial Highways shall be performed during nighttime work hours. Painting on collector and residential streets shall be performed during daytime work hours. Legend shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the legend, including repainting as

necessary, to the City's satisfaction.

**Quality Requirements:** At the end of each work session, the Firm shall follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **45. Paint White Legends** (Units: Each Letter)

**Define Unit:** This is measured by the completion of each white standard or oversized legend painted. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses painting white traffic legends on the traveled portion of the highway to provide defined legends for vehicle and pedestrian control. This includes the annual school zone restriping during the month of August, once per contract repainting of existing citywide legends, and new legends as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all white standard legends citywide with approved paint materials and approved paint thickness. All paint shall be reflectorized. Repainting shall be done in one coat. New painting of legends shall be done with two coats of paint which application shall be separated by seven calendar days. All painting of legends shall meet the size and shape of existing City legends whether or not the legends are standard size or oversized. A legend is defined as a whole word paid by letter such as "25," "Stop," "Ahead," or "Signal," regardless of the number of letters painted. This activity includes yield triangles.

The Firm shall submit certified copies of the manufacturer's test reports and the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. Painting on Arterial Highways shall be performed during nighttime work hours. Painting on collector and residential streets shall be performed during daytime work hours. Legend shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the legend, including repainting as necessary, to the City's satisfaction.

**Quality Requirements:** At the end of each work session the Firm should follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **46. Paint White Arrow/Bike Lane Legends** (Units: Each)

**Define Unit:** This is measured by the completion of each white standard or oversized arrow legend

or bike lane legend set painted. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses painting white traffic legends on the traveled portion of the highway to provide defined legends for vehicle and pedestrian control. This includes the annual school zone restriping during the month of August, once per contract repainting of existing citywide legends and new legends as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all white standard legends citywide with approved paint materials and approved paint thickness. All paint shall be reflectorized. Repainting shall be done in one coat. New painting of legends shall be done with two coats of paint which application shall be separated by seven calendar days. All painting of legends shall meet the size and shape of existing City legends whether or not the legends are standard size or oversized. Arrow and bike lane legends include all types and sizes of painted arrows and bike lane legend sets.

The Firm shall submit certified copies of the manufacturer's test reports and the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. Painting on Arterial Highways shall be performed during nighttime work hours. Painting on collector and residential streets shall be performed during daytime work hours. Legend shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the legend, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session the Firm should follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **47. Install Thermoplastic Legend (Units: Each Letter)**

Define Unit: This is measured by the completion of each standard or oversized thermoplastic legend. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement in accordance with Caltrans Standard Specifications Section 84. This activity encompasses the preparation, installation, or refurbishing of white and yellow traffic legends on the traveled portion of the highway to provide defined legends for vehicle and pedestrian control, and as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, installation of primer base coat, and glass bead reflectorizing all standard legends citywide with approved materials and approved thickness. All thermoplastic legends shall meet the size and shape of existing City legends whether or not the legends are standard size or

oversized. A legend is defined as a whole word paid by letter such as "25," "Stop," "Ahead," or "Signal," regardless of the number of letters installed. This activity includes yield triangles.

Installation on Arterial Highways shall be performed during nighttime work hours. Installation on collector and residential streets shall be performed during daytime work hours. Legend shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the legend, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session the Firm should follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **48. Install White Thermoplastic Arrow/ Bike Lane Legend (Units: Each)**

Define Unit: This is measured by the completion of each white standard or oversized arrow legend or bike lane legend set installed. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement in accordance with Caltrans Standard Specifications Section 84. This activity encompasses the preparation, installation, or refurbishing of white and yellow traffic legends on the traveled portion of the highway to provide defined legends for vehicle and pedestrian control, and as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, installation of primer base coat, and glass bead reflectorizing all standard legends citywide with approved materials and approved thickness. All thermoplastic legends shall meet the size and shape of existing City legends whether or not the legends are standard size or oversized. Arrow and bike lane legends include all types and sizes of arrows and bike lane legend sets.

Installation on Arterial Highways shall be performed during nighttime work hours. Installation on collector and residential streets shall be performed during daytime work hours. Legend shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the legend, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session the Firm should follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **49. Interstate 5 Shield Legend Painting (Unit: Each)**

Define Unit: This is measured by the completion of each oversized Interstate 5 legend painted. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the preparation, installation, or refurbishing of interstate shield legends on the traveled portion of the highway utilizing the City provided custom stencil set

to provide defined legends for vehicle and pedestrian control. This includes once per contract repainting of existing citywide legends and new legends as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and painting or repainting all interstate shield legends citywide with approved paint materials and approved paint thickness. All paint shall be reflectorized. Repainting shall be done in one coat. New painting of legends shall be done with two coats of paint which application shall be separated by seven calendar days. All painting of legends shall meet the size and shape of existing City legends whether or not the legends are standard size or oversized. A legend is defined as a whole multi-colored Interstate 5 Shield.

The Firm shall submit certified copies of the manufacturer's test reports and the Greenbook Standard Specifications or Caltrans Standard Specifications, as selected by the City designated representative, and best management practices. Test reports shall indicate the name of the manufacturer, type of material, date of manufacture, quantity, State Specification number, manufacturer's lot or batch number, and results of the required tests. Test reports shall be signed by an authorized representative of the manufacturer. White and black traffic line paint shall dry to a "no traffic pickup" condition in 30 seconds. The "no traffic pickup" time shall be determined in accordance with ASTM D711. The paint shall be completely dry in not more than 3 minutes when preheated to the temperature recommended by the manufacturer before application. All white paint shall contain at least 12 percent titanium dioxide. Painting on Arterial Highways shall be performed during nighttime work hours. Painting on collector and residential streets shall be performed during daytime work hours. legend shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the legend, including repainting as necessary, to the City's satisfaction.

Quality Requirements: At the end of each work session the Firm should follow standards and specifications, have a manufacturer's test report specifying compliant materials, create straight and neat paint edges, and have all materials and debris cleaned from the work area. All work to be to the satisfaction of the City designated representative.

#### **50. Striping Layout (Units: Linear Feet Per Coat)**

Define Unit: This is measured by the length of new striping and pavement legends in linear feet to be installed. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. The work includes the pre-marking of lane lines following construction activity or for the installation of new striping to provide a guide for striping operations as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and placement of striping guide lines (cat-tracking) per plans as provided by the City designated representative.

Quality Requirements: At the end of each work session, the Firm shall follow standards and specifications, create straight and neat paint guide lines, and otherwise have the work area ready to receive lane lines and marking painting. All work to be to the satisfaction of the City designated representative.

#### **51. Removal of Markings or Striping: Wet Sandblasting (Units: Square Feet)**

Define Unit: This is measured by the amount of markings or striping in square feet to be removed by wet sandblasting. The surface area of the paint to be removed will be measured in square feet. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the temporary painting over of traffic markings or lane striping on the traveled portion of the roadway to temporarily remove markings and/or lane striping that are to be moved or eliminated followed by permanent removal by wet sandblasting. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, applying black flat paint for the markings to be removed pursuant to a coordinated schedule for the new installation of markings and striping, and permanent removal by wet sandblasting within 14 calendar days of the temporary painting over of the markings or lane striping. Removal work is to include street sweeping to removal all debris. Work is to be performed during either daytime or nighttime work hours, as directed by the City designated representative. Marking and striping shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the markings and striping to the City's satisfaction.

Quality Requirements: At the end of each session, markings or striping should be removed so that the public cannot see them to ensure safety, comply with standards and specification, and the work area should be cleaned of all debris. All work to be to the satisfaction of the City designated representative.

#### **52. Removal of Markings or Striping: Micro-grinding (Units: Square Feet)**

Define Unit: This is measured by the amount of markings or striping in square feet to be removed by micro-grinding with grinder/scarifier. The surface area of the paint to be removed will be measured in square feet. This will be performed on an as requested basis.

This activity encompasses the removal of painted striping and markings by grinding in accordance with industry standards and AQMD compliance. This work will also include the use of the street sweeper and traffic control.

Quality Requirements: At the end of the work session all areas should be cleaned of debris and maintained pursuant to proper standards and specifications. All work to be to the satisfaction of the City designated representative.

#### **53. Pavement Markers (Units: Each Marker)**

Define Unit: This is measured by the completion of each RPM replaced in kind. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the installation and replacement of raised pavement markers on new and existing delineated roadways. The Firm shall install new raised pavement markers after roadway repairs or to replace worn out markers as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and placement

of raised pavement markers per task order. Three test specimens may be randomly selected from the sample for each test except as otherwise specified and tested for conformance with Greenbook standards and specifications. If any one of the three specimens fails to comply with the requirements of the specifications, the failure shall be a basis for rejection of the entire lot or shipment represented by the sample. RPMs shall be guaranteed to perform satisfactorily for up to five (5) years. During the guarantee period, the Firm shall bear all costs to maintain the RPMs to the City's satisfaction.

Quality Requirements: At the end of each session, RPMs should be replaced or maintained so that the public can see them with proper reflectivity to ensure safety, conform to standards and specifications, and the work area should be cleaned of all debris. All work to be to the satisfaction of the City designated representative.

#### **54. Curb Paint (Units: Linear Feet)**

Define Unit: This is measured by the amount of curb and gutter in linear feet painted per color designated. The top of curb will be measured for surface length in linear feet. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the painting of curbs with various colors to enforce parking regulations on an as requested basis and as designated by the City designated representative. The curb surface must be prepared by cleaning or scraping prior to applying paint. The application of appropriate curb paint shall be done with rollers or airless paint spray equipment as requested by the City. Curbs are painted on an as requested basis based on inventory and new assignments are painted pursuant to work as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of temporary no parking zones and traffic control, cleaning and scraping the existing painted curb prior to applying new paint, applying two coats of new paint, protecting all adjacent surfaces from paint overspray, and removal of traffic control after the paint has dried. White and yellow curb paint shall be reflectorized. Curb painted shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the curb paint to the City's satisfaction.

Quality Requirements: At the end of the work session, the curb will be painted pursuant to the specifications and standards, painted with requested color, the work site is cleaned, and curbs shall be painted pursuant to proper standards and specifications. All work to be to the satisfaction of the City designated representative.

#### **55. Supply Standard Sign Post for Installation (Units: Material Cost+)**

Define Unit: This is measured by the "each" cost for sign post/extension supplied. This will be performed on an as requested basis.

This activity encompasses the procurement of standard round, square telespar sign posts w/ base anchors, and post extensions to the City of Lake Forest as determined by the City designated representative.

**56. Sign Post Installation and Replacement (Units: Each)**

Define Unit: This is measured by each sign post installed and/or replaced. This will be performed on an as requested basis.

This activity encompasses the installation and replacement of both round street name sign and square telespar sign posts w/ base anchors in concrete or soil. Installation and replacement will include, but is not limited to, various subtasks for proper planning and performing the work including labor, assembly hardware, cutting and repair to the concrete around the post, and the proper disposal and recycling of post materials as determined by the City designated representative. Damaged posts shall be replaced in kind. The job and work must follow identified job standards, specifications, and industry requirements.

**57. Supply Standard Traffic Signs for Installation (Units: Material Cost+)**

Define Unit: This is measured by each standard sign supplied. This will be performed on an as requested basis.

This activity encompasses the procurement of standard California CA MUTCD traffic signs, street name signs, and guide markers to the City of Lake Forest. Signs supplied for installation shall utilize the highest grade of materials available on the market including aluminum-based signs with a minimum of high-intensity prismatic grade reflective sheeting and shall be guaranteed to perform satisfactorily for up to five (5) years. During the guarantee period, the Firm shall bear all costs to maintain the sign to the City's satisfaction.

**58. Remove and Replace Standard Traffic Sign (Units: Each)**

Define Unit: This is measured by each standard sign removed and replaced. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the maintenance, repair, replacement, proper disposal and recycling of materials , and installation of California MUTCD standard traffic signs, street name signs, and guide markers as determined by the City designated representative. This activity includes the removal and replacement of damaged signs, the placement of new signs on existing posts (or new posts by separate bid item), installation of post extensions, and maintenance of signs and posts. The replacement of damaged stop signs and posts shall be completed within 24 hours of the issued Task Order and all other signs will be installed in accordance with the regular schedule of activities as designated by the City designated representative. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, removal of signs and posts, mounting hardware, installation of signs and posts, and performing routine maintenance as directed. Signs replaced/installed shall utilize the highest grade of materials available on the market including aluminum-based signs with a minimum of high-intensity prismatic grade reflective sheeting and shall be guaranteed to perform satisfactorily for up to five (5) years. During the guarantee period, the Firm shall bear all costs to maintain the sign to the City's satisfaction.

**Quality Requirements:** At the end of the work session, proper signage should be posted, the area should be cleaned of debris, and signs shall be maintained pursuant to proper standards and specifications. All work to be to the satisfaction of the City designated representative.

**59. Nighttime Sign Reflectivity Survey (Units: Lump sum)**

**Define Unit:** This activity is to be completed on an as requested basis to review the reflectivity of all CA MUTCD signage in the city to establish and monitor a baseline reflectivity standard in compliance with FHWA standards. Nighttime surveys can occur monthly, quarterly or annually, bi-annually or as selected by the City. Payment for this work shall be paid on a prorated basis equivalent to the interval selected.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the nighttime inspection and testing of 100% of the City's CA MUTCD signage on an as requested basis. The work shall, utilizing standards developed by FHWA or other agency as approved by the City designated representative, test the nighttime reflectivity of all City signage utilized for Traffic Control per the California CA MUTCD. The testing equipment shall be documented to be current and capable of testing to the standards established by FHWA. Any signage not meeting the reflectivity standard shall be fully identified and submitted to the City designated representative for replacement approval. No signage shall be replaced without the City designated representative's designation.

The Firm may utilize approved FHWA criteria to evaluate reflectivity. ([https://safety.fhwa.dot.gov/roadway\\_dept/night\\_visib/](https://safety.fhwa.dot.gov/roadway_dept/night_visib/)) They should choose to perform visual nighttime inspections or measure the retroreflectivity using a portable retroreflectometer or obtain approval by the City designated representative as follows:

1. **Visual Nighttime Inspection Method:** This method assesses the visibility and retroreflectivity of the traffic signs as the inspector approaches the sign. All signs must have retroreflectivity levels at or above the minimum levels. One of three procedures shall be conducted in addition to visual inspection following CA MUTCD checklists. The three acceptable methods are the Calibration Signs Procedure, Consistent Parameters Procedure, and Comparison Panels Procedure.
2. **Measured Retroreflectivity Method:** All signs must have retroreflectivity levels at or above the minimum levels. Signs shall be measured using a handheld retroreflectometer following ASTM E1709, Standard Test Method for Measurement of Retroreflective Signs Using a Portable Retroreflectometer. A sign needs to be replaced if the average retroreflectivity value is less than the appropriate minimum level.

**Quality Requirements:** At the end of the work session, annually, every traffic control sign in the City shall be tested for nighttime reflectivity. All work to be to the satisfaction of the City designated representative.

**60. Guardrail Repair (Units: Linear Feet)**

**Define Unit:** This is measured by the amount of guardrail repaired in linear feet. The length will be

measured in linear feet. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the temporary repair response, installation and final repair of structurally damaged guard or bridge rail sections and posts to prevent vehicle access. A repair response is required within 24 hours on structurally damaged guardrails. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert (USA), clearing and grubbing, establishment of proper traffic control, removal and replacement of damaged guardrail sections as designated in accordance with Caltrans Standards, setting forms, pouring and finishing the hardscape, if any, restoring landscaping or irrigation damage, if any, and cleaning the work site. Guardrail shall be guaranteed to perform satisfactorily for up to five (5) years. During the guarantee period, the Firm shall bear all costs to maintain the guardrail to the City's satisfaction.

Quality Requirements: At the end of each work session, the site should be clean, correct signs and markers replaced on the barricades and guardrails, the overall construction should be strong, and the guardrail shall be repaired pursuant to proper standards and specifications. All work to be to the satisfaction of the City designated representative.

**61. City Events Support (Units: Individual Crew Hours)**

Define Unit: This item is measured in crew hours for the support of the City's annual "4<sup>th</sup> of July Parade" event.

This activity includes assistance for pre-planning of event, setup, take down and clean up for the City's Fourth of July Parade. Items include traffic control equipment, setup and removal, supply equipment and placement of crowd control measures, post event clean-up and general labor as directed by City Staff. The event is held either on a weekend and/or holiday and requires a minimum staff of 8 crew members, 1 supervisor, and materials for 10 hours. See Appendix E for 4<sup>th</sup> of July road closures and equipment.

Quality Requirements:

At the end of the event all City streets should be free for traffic control measures and any debris. All work to be to the satisfaction of the City designated representative.

**62. Nighttime Streetlight Outage Surveys (Units: Lump Sum)**

Define Unit: This activity will review the operational status of the approximately 4,500 street lights and luminaires (formerly known traffic signal safety light) on every public street in the city in both the SCE and City owned service territories. This will be performed on an as requested basis following the City provided data collection map.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement and foot-candle requirement for public right-of-way. This activity encompasses the nighttime inspection of every street light and luminaires on all public streets in the City of Lake Forest on an as requested basis and reporting any outages to the responsible party. The City maintains a small portion of streetlights, while a majority are serviced by SCE. Data collection will be done in the field using the ESRI ArcGIS Collector application for tablets/smart phones or a third-party software program. If third party software is used, the information will be converted back

to ArcGIS shapefile format for the City's usage. The Firm will be responsible for providing data that is compatible with the City's existing XY-Maps GIS-based system.

Quality Requirements: At the end of the work session every streetlight and luminaires associated with public streets in the city shall be inspected and outages reported to the responsible party to the satisfaction of the City designated representative.

### **63. Storm Patrol Response (Units: Time and Materials Basis)**

Define Unit: This is measured in the amount of time and materials needed for storm patrol and emergency repair including all labor, equipment, and materials to perform the work as defined. This requires minimum one person to provide patrols and necessary inspections for storm related events during and after normal work hours. A minimum two-person response crew is required to be on call for responding to storm events. A long reach excavator/crane rental is required for debris removal at Canada Gate.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses a minimum one person to provide storm patrol inspections and a minimum two responders. Equipment includes the possible need for a long reach excavator/crane, vehicles for inspector and responders, hand equipment and materials necessary to perform a site visit to any inlet identified as not operational during a storm event and to take actions required to clear the drain for proper drainage flow. This is an emergency service that shall be provided within two-hours of notice and shall continue until the storm event has passed. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including inspecting storm drains, photographing findings, and evaluating and performing maintenance/cleaning of drain inlets that are not operational during a storm event, and debris disposal. This is an on-call emergency activity which may occur during the daytime or nighttime. **An hourly rate sheet for equipment and man hours is required to be submitted with proposal demonstrating available equipment for storm and street maintenance activities.**

Quality Requirement: At the end of each work session, the drains are cleared of debris to ensure storm water is not backed up causing flooding and drains are photographed to create a document and inventory of all problem drain inlets. All work to be to the satisfaction of the City designated representative.

### **64. Emergency Repairs (Units: Time and Materials Basis)**

Define Unit: This is measured in the amount of time and materials needed for emergency repairs including all labor, equipment, and materials to perform the work as defined.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses all equipment including vehicles for inspector and responders, hand equipment and materials necessary to perform emergency repairs. This is an emergency service that shall be provided within two-hours of notice. The job and work must follow identified job standards, specifications, and industry requirements. This is an on-call emergency activity which may occur during the daytime or nighttime. An hourly rate sheet for equipment and man hours is required to be submitted with proposal demonstrating available equipment for storm and street maintenance activities.

**Quality Requirement:** At the end of each work session, streets should be cleared of debris. All work to be to the satisfaction of the City designated representative.

**65. Thermoplastic Drain Stencil (Units: Each Drain)**

**Define Unit:** This is measured by the completion of each thermoplastic drain stencil, and the proper documentation to the City of Lake Forest. See Appendix G for City thermoplastic stencil design. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the maintenance of storm drain stencils/decals throughout the city to provide public awareness about stormwater. The drainage inlet curb surface shall be prepared by cleaning, scraping, or washing prior to application of stencil. Appropriate curb markers shall be installed using adhesive in conjunction with the application of the thermoplastic stencil. This activity includes maintaining marking inventory as needed. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and applying drain stencil pursuant to the work request. Stencil shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the stencil to the City's satisfaction.

**Quality Requirements:** At the end of each work session, storm drain inlets shall be marked with approved City stencil, stencil should be legible to the public, work area should be clean, and work documented in the ESRI ArcGIS Collector application. All work to be to the satisfaction of the City designated representative.

**66. Painted Drain Stencil (Units: Each Drain)**

**Define Unit:** This is measured by the completion of each painted drain stencil, and the proper documentation to the City of Lake Forest. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the maintenance of storm drain stencils/decals throughout the city to provide public awareness about stormwater. The drainage inlet curb surface shall be prepared by cleaning, scraping, or washing prior to application of stencil. Appropriate curb markers shall be installed by painting the stencil. This activity includes maintaining marking inventory as needed. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control and applying drain stencil pursuant to the work request. Stencil shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the stencil to the City's satisfaction.

**Quality Requirements:** At the end of each work session, storm drain inlets shall be marked with approved City stencil, stencil should be legible to the public, work area should be clean, and work documented in the ESRI ArcGIS Collector application. All work to be to the satisfaction of the City designated representative.

**67. Clean Drains – Vac Truck (Units: Each Drain)**

**Define Unit:** This is measured by each drain or catch basin or inlet cleaned with a Vacuum Mounted Truck and related equipment. This will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the cleaning of drains, catch basins, drainage inlets, pipes, down drains and storm drainage lines with a vacuum truck to insure the drainage system is functioning at full capacity. This work task shall not be utilized unless it is demonstrated to the City's satisfaction that the "Clean/inspect Drains – Manual" was unable to satisfactorily complete the work. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, wearing proper safety equipment, utilizing confined space entry safety standards, as required, and use of appropriate BMP's.

**Quality Requirements:** At the end of each work session, storm drains should be cleaned by removing any debris, work site cleaned, and drains shall be cleaned pursuant to proper standards and specification with full documentation of the quantity of materials removed. All work to be to the satisfaction of the City designated representative.

**68. Clean/Inspect Drains – Manual (Units: Each Drain)**

**Define Unit:** This is measured by each drain or catch basin or inlet or Filterra cleaned by manual labor and hand tools. This activity will be performed on an annual basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses the annual inspection and manual cleaning of drains, catch basins, inlets, grates, screens, Filterras, inserts, pipes, down drains, and storm drainage lines to insure the drainage system is functioning at full capacity. Drains are manually checked and cleaned pursuant to a drain cleaning inventory and the work is to be completed between July 1<sup>st</sup> and September 30<sup>th</sup> of each calendar year. Recurring problem drains are checked and cleaned (as required) after storms. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, wearing proper safety equipment, utilizing confined space entry safety standards, and use of appropriate BMP's. Drains shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the drain to the City's satisfaction.

**Quality Requirements:** At the end of each work session, storm drains should be cleaned removing any debris, work site cleaned, drains shall be cleaned pursuant to proper standards and specifications and the quantities of debris removed shall be fully documented in the ESRI ArcGIS Collector application. All work to be to the satisfaction of the City designated representative.

**69. Clean ARS/CPS Drain Units (Units: Each)**

**Define Unit:** This is measured by each drain or catch basin or inlet cleaned by manual labor and hand tools. This activity will be performed on a biannual basis, once between July 1<sup>st</sup> and September 30<sup>th</sup> and once between April 1<sup>st</sup> and May 31<sup>st</sup>.

This activity encompasses the cleaning of catch basins with Automatic Retractable Screens (ARS) and Connector Pipe Screens (CPS) biannually prior to and after rain season or when requested by City staff. Drains are manually checked/inspected and cleaned pursuant to a drain cleaning inventory. This item includes the removal, haul away and disposal of all debris in and

around the catch basin, ARS, and CPS.

Quality Requirements: At the end of each work session, storm drains should be cleaned removing any debris, work site cleaned, drains shall be cleaned pursuant to proper standards and specifications and the quantities of debris removed shall be fully documented in the ESRI ArcGIS Collector application. All work to be to the satisfaction of the City designated representative.

**70. Clean CDS (Units: Each)**

Define Unit: This is measured by each CDS cleaned. This activity will be performed on an annual basis.

This activity encompasses the cleaning of Continuous Deflection Separation (CDS) annually prior to rain season or when requested by City staff. This item includes man hours for equipment/vac truck and crew, the removal, haul away, and disposal of all debris.

Quality Requirements: At the end of each work session, storm drains should be cleaned removing any debris, work site cleaned, drains shall be cleaned pursuant to proper standards and specifications and the quantity of debris removed shall be fully documented. All work to be to the satisfaction of the City designated representative.

**71. Clean Dissipaters (Units: Each)**

Define Unit: This is measured by each dissipater cleaned. This activity will be performed on an annual basis.

This activity encompasses the removal of trash and debris from storm drain dissipaters prior to the rain season or when requested by City staff. This item includes labor, haul away and disposal of all debris.

Quality Requirements: At the end of each work session, storm drains should be cleaned removing any debris, work site cleaned, drains shall be cleaned pursuant to proper standards and specifications and the quantity of debris removed shall be fully documented. All work to be to the satisfaction of the City designated representative.

**72. Raise Storm Drain Manhole to Grade (Units: Each)**

Define Unit: This is measured by the completion of each storm drain manhole/access structure raised to grade with grade rings with a grade difference of one inch to twelve inches from existing condition. This activity will be performed on an as requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses all labor, equipment and materials to excavate existing storm drain manhole/access structures in order to raise the surface of the structure to existing grade from one inch to twelve inches in grade change and the restoration of the site including related concrete and/or asphalt concrete work. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including contacting Underground Service Alert, clearing and grubbing, inspecting the storm drain manhole/access structure to determine the amount of grade adjustment required, excavating the structure, providing grade rings and mortar to adjust the grade as needed, compacting the work site, restoring the existing concrete

and asphalt concrete in a neat and clean manner and cleaning the site.

Quality Requirement: At the end of each work session, storm drain manhole/access structures are to be flush with adjacent grade to the satisfaction of the City designated representative.

**73. Manual Inspection of Underground Storm Drains (Units: Time and Materials Basis)**

Define Unit: This is measured by the amount of storm drains in linear feet maintained or inspected by a crew of a size necessary to safely enter into confined spaces. This is measured in linear feet from the start to the end of the pipeline inspected. This activity will be performed on a time and materials basis as requested by the City designated representative.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses a crawling or walking inspection of underground storm drain facilities of 36" or greater in diameter or dimension for general conditions of facility, structural soundness, construction defects, blockages, illicit connections, and general acceptability for City acceptance and maintenance. Re-inspection is done as required until deficiencies have been repaired. The job and work must follow identified job standards, specifications, and industry and regulatory safety requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including providing workers trained and certified in confined space entry to inspect, traffic control, photographing and report on the condition of storm drain lines, and cleaning work site when inspection is completed.

Quality Requirements: At the end of each work session, storm drain lines are inspected, photographs taken, and a report is presented to the City designated representative on the condition of the storm drain lines. All work to be to the satisfaction of the City designated representative.

**74. Electronic/Video Inspection of Underground Storm Drains (Units: Time and Materials)**

Define Unit: This is measured by the amount of storm drain in linear feet inspected with video or electronics. This is measured from the start to the finish of the pipeline inspected. This activity will be performed on a requested basis.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses electronic/video inspections of storm drains less than 36" diameter or dimension for general conditions of facility, structural soundness, construction defects, blockages, illicit connections, and general acceptability for maintenance. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including providing workers trained and certified in confined space entry to inspect, video recording, photographing, and reporting on the condition of storm drain lines, traffic control and cleaning work site when inspection is completed.

Quality Requirements: At the end of each work session, appropriate BMP's are used to inspect storm drain lines to produce an MP3 video that can be downloaded and stored on the City's computer. All work to be to the satisfaction of the City designated representative.

**75. Removal of Paint or Material Spills (Units: Time and Materials Basis)**

Define Unit: This activity includes sandblasting/pressure washing or otherwise removal of paint

or material spills and cleaning up the debris. It will be performed on a time and materials basis as requested by the City designated representative.

This activity is generally described, but it is the Firm's responsibility to meet the quality requirement. This activity encompasses providing wet sandblasting or other removal methods of paint or material spills including all traffic control, street sweeping, and clean-up. The job and work must follow identified job standards, specifications, and industry requirements. This will include, but is not limited to, various subtasks for proper planning and performing the work including establishment of proper traffic control, wearing the proper safety equipment, and the use of appropriate BMPs to remove existing traffic control marking so that they are not visible to the public. This activity includes the removal of any hazardous materials or debris that does not belong in the roadway. Removal shall be guaranteed to perform satisfactorily for up to twelve (12) months. During the guarantee period, the Firm shall bear all costs to maintain the paint or material spills to the City's satisfaction.

General Requirement: At the end of each work session, existing traffic control markings are removed so that they are not visible to the public, and/or hazardous materials and debris are removed from the roadway. All work to be to the satisfaction of the City designated representative.

#### **76. Graffiti Removal & Pressure Washing (Units: Time and Materials Basis)**

Define Units: This item is on a request basis. It will be performed on a time and materials basis as requested by the City designated representative.

This activity includes all labor, materials, equipment, vehicles, tools, chemicals, and supplies. At the approval and direction of the City designated representative, chemical cleaning, power washing, steam cleaning, sand blasting, soda blasting, and painting may be required to remove graffiti/stains. All storm drains are to be covered during pressure washing and steam cleaning and effluent properly collected or rerouted into landscaping, without flooding landscaped areas or damaging turf or landscaping.

#### **77. Extra Work (Units: Time and Materials Basis)**

Define Units: This includes a variety of work items. It will be performed on a time and materials basis as requested by the City designated representative.

This activity includes repairs, maintenance, installation or construction within the public right of way, park projects, City facility repairs, open space projects, building repairs, purchasing, procurement of materials excluding those items considered for routine maintenance under crew hour activities.

## I. SCHEDULING

The cost of Scheduling is deemed included in Contract Administration and no additional compensation will be allowed, therefore. The Firm shall perform the services as directed by Task Order expeditiously, within the term of these specifications. The Firm represents that it has the professional and technical personnel required to perform the services in conformance with such conditions. All routine work shall be scheduled to occur within 14 calendar days of the issuance of a Task Order. Emergency work shall be scheduled within a two-hour response time. Upon request of the City, the Firm shall provide a detailed schedule of anticipated performance to meet the schedule outlined by the City. The extension of any time period must be approved in writing by the City. In addition, Firm shall accommodate City directed work by Task Order for which the schedule cannot wait for the standard two-week schedule and must be "plugged" into the current work schedule, as solely determined by City.

The Firm shall supply the City with a written two week schedule of all work that is planned on the Thursday prior to the Monday of the start of the two week scheduling period with a report of accomplishment of prior two week schedule. The Firm representative shall meet monthly with City's representatives updating City on current work and any anticipated issues.

Service levels in the Work Descriptions are the minimum performance standards for the level of work to be completed. The Firm shall attain completion of the works and services at or above the required service levels within the time and schedule or within such extended time.

## II. QUALITY ASSURANCE PROGRAM (IF REQUESTED BY CITY)

At the discretion of the City, the Firm selected may be required to retain an independent quality assurance Consultant to develop, provide, and implement a quality assurance program that includes routine and random inspection of street maintenance services and testing of all materials utilized in the work, during and after street maintenance, at intervals that are indicative of the life expectancy of the asset and to the requirements of the City designated representative to determine quality of work, methodologies, and material. The Consultant shall identify the quality of the completed work and the need for remedial work to resolve any quality discrepancies. The Quality Assurance Plan shall be submitted to and approved by City and then implemented on all work conducted by the Firm.

At the discretion of the City, the Consultant shall report results monthly in a standard form demonstrating quality assurance and monitoring. The program shall track all work, the labor, material and equipment utilized, determine the level of service being provided by the Firm, report all testing and inspection results, and provide recommendations for remedial actions. Material testing shall include compaction testing, strength testing, compliance testing and other testing associated with best management practices and reviews of Certificates of Compliance.

The Quality Assurance Program shall be implemented by an independent entity or firm that will provide to the City and Firm the results of the Firm's work and actions taken on a monthly basis. This entity shall be totally independent financially and legally from the Firm.

Any required remedial or quality related work that is identified in related inspections will be completed without any cost to the City and verified by the independent quality assurance Consultant. The cost of Quality Assurance shall be included in the Lump Sum annual fee for this work and paid for in equal monthly installments.

**EXHIBIT "B"**  
**SCHEDULE OF MAINTENANCE SERVICES**

Contractor shall perform the services as indicated and described in Exhibit "A" Scope of Maintenance Services, as directed by the City.

**EXHIBIT "C"**  
**COMPENSATION**

Contractor shall be paid the not-to-exceed amount of four million eight hundred fifty thousand five hundred twenty-nine dollars and forty-six cents (\$4,850,529.46) based on the schedule and rates below.

In the event that this Agreement is renewed pursuant to Section 3.1.2, the rates set forth above may be increased or reduced each year at the time of renewal, but any increase shall not exceed the Consumer Price Index, All Urban Consumers, Los Angeles-Long Beach-Anaheim.

Item #	Description	Frequency	Quantity	Unit	Unit Price	Total \$
1	Contract Administration	As needed	1	Lump Sum		\$57,600.00
2A	Public Works General Labor A – 1 Person Crew	Daily	600	Person-Hrs.	\$95.00	\$57,000.00
2B	Public Works General Labor B – 2 Person Crew	Daily	1,370	Person-Hrs.	\$215.00	\$294,550.00
2C	Public Works General Labor C – 3 Person Crew	Daily	8	Person-Hrs	\$250.00	\$2,000.00
2D	Public Works General Labor D – 4 Person Crew	Daily	8	Person-Hrs	\$300.00	\$2,400.00
3	Road Maintenance Supervisor	Daily	970	Person/	\$87.00	\$84,390.00
4	Engineering Support	As needed	0	T&M.	N/A	\$10,000.00
5	Tree Pruning 1" to 12" Diameter	As Requested	100	EACH	\$110.25	\$11,025.00
6	Tree Pruning 13" to 30" Diameter	As Requested	1	EACH	\$1,050.00	\$1,050.00
7	Tree Pruning 31" and Above Diameter	As Requested	1	EACH	\$1,365.00	\$1,365.00

8	Tree Removal 1" to 12" Diameter	As Requested	1	EACH	\$1,575.00	\$1,575.00
9	Tree Removal 13" to 30" Diameter	As Requested	1	EACH	\$2,625.00	\$2,625.00
10	Tree Removal 31" and Above Diameter	As Requested	1	EACH	\$4,200.00	\$4,200.00
11	Spray pre-emergent herbicide (RD Shldr)	1x/Year	1000	SF	\$0.031	\$31.00
12	Spray post-emergent herbicide (C&G)	2x/Year	589,392	LF	\$0.031	\$36,542.30
13	Remove and replace 4" AC	As Requested	300	SF	\$36.75	\$11,025.00
14	Remove and replace 6" AC	As Requested	300	SF	\$52.50	\$15,750.00
15	Remove and replace 8" AC	As Requested	300	SF	\$68.25	\$20,475.00
16	Remove and replace 10" AC	As Requested	250	SF	\$78.75	\$19,687.50
17	Remove and replace 12" AC	As Requested	100	SF	\$89.25	\$8,925.00
18	AC Berm – Type D2 6"	As Requested	100	LF	\$63.00	\$6,300.00
19	AC Berm – Type D2 8"	As Requested	100	LF	\$64.00	\$6,400.00
20	AC Crack Repair Cleaning & Filling	As Requested	0	T&M	N/A	\$15,000.00
21	Cold Patch of AC Pavement - Temporary	As Needed	1,500	SF	\$16.80	\$25,200.00
22	Patch of AC Pavement – Permanent	As Requested	250	SF	\$15.75	\$3,937.50

23	AC Cold Plane/Milling up to 2"	As Requested	1,000	SF	\$12.60	\$12,600.00
24	AC Hot Mix 2" Overlay	As Requested	12	Tons	\$551.25	\$6,615.00
25	Pave A.C. Slot in 3 working days 4"	As Requested	60	SF	\$128.21	\$7,692.60
26	Pave A.C. Slot in 3 working days 6"	As Requested	10	SF	\$136.29	\$1,362.90
27	Remove and replace 4-inch sidewalk	As Requested	1,000	SF	\$31.50	\$31,500.00
28	Remove and replace 6-inch sidewalk	As Requested	1,000	SF	\$52.50	\$52,500.00
29	Remove and replace curb and gutter	As Requested	100	LF	\$105.00	\$10,500.00
30	Repair Drive Approach	As Requested	1	SF	\$63.53	\$63.53
31	Repair Access Ramp	As Requested	1	EACH	\$10,500.00	\$10,500.00
32	Sidewalk Inspection Program	As Requested	148 miles	Crew-Hrs.	\$85.00	\$12,580.00
33	Sidewalk Grinding	As Requested	3500	LF	\$12.08	\$42,280.00
34	Sidewalk Ramping	As Requested	600	LF	\$20.69	\$12,414.00
38	Thermoplastic Stop Bars, Diagonal Markings, and Chevrons	As Requested	50	LF	\$2.73	\$136.50
40	Yellow Crosswalks	Annually	8600	LF	\$1.46	\$12,556.00
41	Thermoplastic Crosswalks	As Requested	100	LF	\$2.73	\$273.00

42	Ladder Crosswalks	Annually	5,400	LF	\$1.46	\$7,884.00
43	Thermoplastic Ladder Crosswalk	As Requested	100	LF	\$2.73	\$273.00
44	Paint Yellow Standard Legends	Annually	550	EACH	\$15.66	\$8,613.00
47	Install Thermoplastic Legend	As Requested	10	EACH	\$30.92	\$309.20
48	Install White Thermoplastic Arrow/ Bike Lane Legends	As Requested	10	EACH	\$104.76	\$1,047.60
50	Striping Layout	As Requested	1,000	LF	\$0.21	\$210.00
51	Removal of Markings or Striping: Wet Sandblasting	As Requested	750	SF	\$5.88	\$4,410.00
52	Removal of Markings or Striping: Micro-grinding	As Requested	750	SF	\$4.54	\$3,405.00
53	Pavement Markers	As Requested	400	EACH	\$6.93	\$2,772.00
54	Curb Paint	As Requested	10,000	LF	\$1.31	\$13,100.00
55	Supply Standard Sign Post for Installation	As Requested		COST +	N/A	\$25,000.00
56	Sign Post Installation and Replacement	As Requested	250	Each	\$157.50	\$39,375.00
57	Supply Standard Traffic Sign for Installation	As Requested		COST +	N/A	\$25,000.00

58	Remove and Replace Traditional Traffic Sign	As Requested	1,000	EACH	\$73.50	\$73,500.00
59	Nighttime Sign Reflectivity Survey	As Requested	As Requested	Lump Sum	\$14,175.00	\$14,175.00
60	Guardrail Repair	As Requested	100	LF	\$131.25	\$13,125.00
61	City Events Support	Annually	165	Crew Hours	\$205.00	\$33,825.00
62	Nighttime Streetlight Outage Surveys	As Requested	1	Lump Sum	\$9,975.00	\$9,975.00
63	Storm Patrol Response	As Requested	Yearly	T&M	N/A	\$50,000.00
64	Emergency Repairs	As Requested	Yearly	T&M	N/A	\$50,000.00
65	Thermoplastic Drain Stencil	As Requested	100	EACH	\$89.25	\$8,925.00
66	Painted Drain Stencil	As Requested	25	EACH	\$78.75	\$1,968.75
67	Clean drains-Vac Truck	As Requested	1	EACH	\$3,381.84	\$3,381.84
68	Clean/Inspect drains-Manual	Annually	1,060	EACH	\$60.00	\$63,600.00
69	Clean ARS/CPS Drain Units	Annually	700	EACH	\$68.25	\$47,775.00
70	Clean CDS	Annually	2	EACH	\$3,386.10	\$6,772.20
71	Clean Dissipaters	Annually	4	EACH	\$1,693.07	\$6,772.28
72	Raise Storm Drain Manhole to Grade	As Requested	1	EACH	\$5,544.00	\$5,544.00
73	Manual Inspection of Underground Storm Drains	As Requested	As Requested	T&M	N/A	\$500.00

74	Electronic/Video Inspection of Underground Storm Drains	As Requested	Yearly	T&M	N/A	\$2,500.00
75	Removal of Paint or Material Spills	As Requested	Yearly	T&M	N/A	\$1,000.00
76	Graffiti Removal & Pressuring Washing	As Requested	Yearly	T&M	N/A	\$1,000.00
77	Extra Work	As Requested	As Requested	T&M	N/A	\$40,000.00
Total Fee Proposal: \$						<b>\$1,478,364.70</b>

35	Citywide White Striping	Biennially	905,000	LF	\$0.15	\$135,750.00
36	Citywide Yellow Striping	Biennially	237,052	LF	\$0.24	\$56,892.48
37	Stop Bars, Diagonal Markings, and Chevrons	Biennially	7,200	LF	\$1.46	\$10,512.00
39	White Crosswalks	Biennially	54,275	LF	\$1.46	\$79,241.50
45	Paint White Legends	Biennially	4,300	EACH	\$15.66	\$67,338.00
46	Paint White Arrow/ Bike Lane Legends	Biennially	1,600	EACH	\$36.90	\$59,040.00
49	Interstate 5 Shield Legend Painting	Biennially	11	EACH	\$605.58	\$6,661.38
						<b>\$415,435.36</b>

**EXHIBIT "D"**  
**INSURANCE REQUIREMENTS**

1.1 Insurance.

1.1.1 Time for Compliance. Contractor shall not commence work under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this section.

1.1.2 Types of Insurance Required. As a condition precedent to the effectiveness of this Agreement for work to be performed hereunder, and without limiting the indemnity provisions of the Agreement, the Contractor, in partial performance of its obligations under such Agreement, shall procure and maintain in full force and effect during the term of the Agreement the following policies of insurance. If the existing policies do not meet the insurance requirements set forth herein, Contractor agrees to amend, supplement or endorse the policies to do so.

**Commercial General Liability:** Commercial General Liability Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 0001, or the exact equivalent, with limits of not less than \$5,000,000 per occurrence and not less than \$10,000,000 in the general aggregate. Defense costs shall be paid in addition to the limits. The policy shall contain no endorsements or provisions (1) limiting coverage for contractual liability; (2) excluding coverage for claims or suits by one insured against another (cross-liability); or (3) containing any other exclusion(s) contrary to the terms or purposes of this Agreement.

**Automobile Liability Insurance:** Automobile Liability Insurance with coverage at least as broad as Insurance Services Office Form CA 0001 covering "Any Auto" (Symbol 1), or the exact equivalent, covering bodily injury and property damage for all activities with limits of not less than \$1,000,000 combined limit for each occurrence.

**Workers' Compensation:** Workers' Compensation Insurance, as required by the State of California and Employer's Liability Insurance with a limit of not less than \$1,000,000 per accident for bodily injury and disease.

**Professional Liability (Errors & Omissions):** Professional Liability insurance or Errors & Omissions insurance appropriate to Consultant's profession with limits of not less than \$1,000,000. Covered professional services shall specifically include all work to be performed under the Agreement and delete any exclusions that may potentially affect the work to be performed (for example, any exclusions relating to lead, asbestos, pollution, testing, underground storage tanks, laboratory analysis, soil work, etc.). If coverage is written on a claims-made basis, the retroactive date shall precede the effective date of the initial Agreement and continuous coverage will be maintained or an extended reporting period will be exercised for a period of at least three (3) years from termination or expiration of this Agreement.

**Contractors Pollution Liability:** Contractors Pollution Liability Insurance covering all of the contractor's operations to include onsite and offsite coverage for bodily injury (including death and mental anguish), property damage, defense costs and cleanup costs with minimum limits of \$5,000,000 per loss and \$10,000,000 total all losses. The policy shall contain no endorsements

or provisions limiting contractual liability or coverage for cross liability of claims or suits by one insured against another.

If coverage is written on a claims-made basis, the retroactive date shall precede the effective date of the initial Agreement and continuous coverage will be maintained or an extended reporting period will be exercised for a period of at least three (3) years from termination or expiration of this Agreement.

1.1.3 Endorsements. Required insurance policies shall contain the following provisions, or Contractor shall provide endorsements on forms approved by the City to add the following provisions to the insurance policies:

(A) Commercial General Liability Contractor's Pollution Liability:

Additional Insured: The City, its officials, officers, employees, agents, and volunteers shall be additional insureds with regard to liability and defense of suits or claims arising out of the performance of the Agreement. For all policies of Commercial General Liability insurance, Contractor shall provide endorsements in the form of ISO CG 20 10 10 01 and 20 37 10 01 (or endorsements providing the exact same coverage) to effectuate this requirement.

Additional Insured Endorsements shall not (1) be restricted to "ongoing operations"; (2) exclude "contractual liability"; (3) restrict coverage to "sole" liability of Contractor; or (4) contain any other exclusions contrary to the terms or purposes of this Agreement.

Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

Automobile Liability:

Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

Professional Liability (Errors & Omissions):

Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

Contractual Liability Exclusion Deleted: This insurance shall include contractual liability applicable to this Agreement. The policy must "pay on behalf of" the insured and include a provision establishing the insurer's duty to defend.

Workers' Compensation:

Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

Waiver of Subrogation: A waiver of subrogation stating that the insurer waives all rights of subrogation against the City, its officials, officers, employees, agents, and volunteers.

1.1.4 Primary and Non-Contributing Insurance. All policies of Commercial General Liability and Automobile Liability insurance shall be primary and any other insurance, deductible, or self-insurance maintained by the City, its officials, officers, employees, agents or volunteers shall not contribute with this primary insurance. Policies shall contain or be endorsed to contain such provisions.

1.1.5 Waiver of Subrogation. All required policies of Commercial General Liability and Automobile Liability insurance shall contain or be endorsed to waive subrogation against the City, its officials, officers, employees, agents, and volunteers or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against the City, its officials, officers, employees, agents and volunteers and shall require similar written express waivers and insurance clauses from each of its subcontractors.

1.1.6 Deductibles and Self-Insured Retentions. Any deductible or self-insured retention must be approved in writing by the City and shall protect the City, its officials, officers, employees, agents and volunteers in the same manner and to the same extent as they would have been protected had the policy or policies not contained a deductible or self-insured retention.

1.1.7 Evidence of Insurance. The Contractor, concurrently with the execution of the Agreement, and as a condition precedent to the effectiveness thereof, shall deliver either certified copies of the required policies, or original certificates on forms approved by the City, together with all endorsements affecting each policy. Required insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to the City for approval. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. At least fifteen (15) days prior to the expiration of any such policy, evidence of insurance showing that such insurance coverage has been renewed or extended shall be filed with the City. If such coverage is cancelled or reduced and not replaced immediately so as to avoid a lapse in the required coverage, Contractor shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the City evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies.

1.1.8 Failure to Maintain Coverage. In the event any policy of insurance required under this Contract does not comply with these specifications or is canceled and not replaced immediately so as to avoid a lapse in the required coverage, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Contractor or City will withhold amounts sufficient to pay premium from Contractor payments. In the alternative, City may cancel this Agreement.

1.1.9 Acceptability of Insurers. Each such policy shall be from a company or companies with a current A.M. Best's rating of no less than A:VII and authorized to transact business of insurance in the State of California, or otherwise allowed to place insurance through surplus line brokers under applicable provisions of the California Insurance Code or any federal law.

1.1.10 Enforcement of Contract Provisions (non estoppel). Contractor acknowledges and agrees that actual or alleged failure on the part of the City to inform Contractor of non-compliance with any requirement imposed no additional obligation on the City nor does it waive any rights hereunder.

1.1.11 Requirements Not Limiting. Requirement of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance.

1.1.12 Insurance for Subcontractors. Contractor shall include all subcontractors engaged in any work for Contractor relating to this Agreement as additional insureds under the Contractor's policies, or the Contractor shall be responsible for causing subcontractors to purchase the appropriate insurance in compliance with the terms of these Insurance Requirements, including adding the City, its officials, officers, employees, agents and volunteers as Additional Insureds to the subcontractor's policies. All policies of Commercial General Liability insurance provided by Contractor's subcontractors performing work relating to this Agreement shall be endorsed to name the City, its officials, officers, employees, agents and volunteers as additional insureds using endorsement form ISO CG 20 38 04 13 or an endorsement providing equivalent coverage. Contractor shall not allow any subcontractor to commence work until it has received satisfactory evidence of subcontractor's compliance with all insurance requirements under this Agreement, to the extent applicable. The Contractor shall provide satisfactory evidence of compliance with this section upon request of the City.