AGENDA ITEM NO. 7.b.

CITY OF GARDEN GROVE

INTER-DEPARTMENT MEMORANDUM

To:

Matthew Fertal

From: Keith G. Jones

Dept:

City Manager

Dept: Public Works

Subject:

RECOMMENDATION TO AWARD

Date: August 12, 2008

CONTRACT FOR ON-CALL RUBBERIZED SLURRY SEAL, (REAS), TYPE I AND TYPE II, AT VARIOUS CITY LOCATIONS

OBJECTIVE

To receive authorization from the City Council for the City Manager to execute a contract with Pavement Coatings Company, for On-Call Rubberized Street Slurry (REAS) on various City streets.

BACKGROUND

The project will consist of numerous phases, on various streets, and on a periodic basis. Prior to each phase, the selected streets for the slurry seal will have been identified, reviewed, and all necessary preparation work will have been completed. The Purchasing Division was requested to advertise for bids for the project. The contract is a two (2) year contract with three (3), one (1) year options to renew.

ANALYSIS

In response to prescribed bidding procedures, invitations were sent to eight (8) contractors and the following two (2) bids were received:

Contractor	Type I	Total Cost Type II Per Year	Total Cost Per Year	
Pavement Coatings Co. Cypress, CA	\$194,000	\$218,000	\$412,000	
American Asphalt South, Inc. Fontana, CA	\$259,700	\$276,000	\$535,000	

The Streets Division examined the bids received and determined that the lowest responsible bidder is Pavement Coatings Co. Furthermore, staff has researched the

RECOMMENDATION TO AWARD CONTRACT FOR ON-CALL RUBBERIZED SLURRY SEAL (REAS), TYPE I AND TYPE II AT VARIOUS CITY OF GARDEN GROVE LOCATIONS August 12, 2008 Page 2

proposed contractor's service history, with the City of Garden Grove and public, finding no discrepancies in customer service.

FINANCIAL IMPACT

Funding for this first year of the project is available in the 2008/2009 Street Division Budget. Funding for the second year will be allocated. A termination clause has been included in the contract should funding become unavailable.

COMMUNITY VISION IMPLEMENTATION

Approval of the contract for On-Call Rubberized Street Slurry Seal (REAS) will aid in meeting the Transportation and Infrastructure Goal, which is to maintain and improve the transportation system in the City, ensuring the safe, efficient flow of traffic.

RECOMMENDATION

It is recommended that the City Council:

- Award the contract to the lowest responsible bidder, Pavement Coatings Co., in the amount not to exceed \$412,000.
- Authorize the City Manager and the City Clerk to execute the agreement on behalf of the City.

KEITH G. JONES

Public Works Director

BY: Robert R. Moungey

Public Works Supervisor

Attachment: Agreement

Recommended for Approval

Matthew Ferta City Manager

SECTION 4 - AGREEMENT

PROJECT AGREEMENT

THIS AGREEMENT is made this day of, 2008 by the CITY OF GARDEN GROVE, a municipal corporation, ("CITY"), and Pavement Coatings Co. , hereinafter referred to as ("CONTRACTOR").
RECITALS:
The following recitals are a substantive part of this Agreement:
This Agreement is entered into pursuant to Garden Grove Council authorization dated
CITY desires to utilize the services of CONTRACTOR to Furnish All Labor, Material And Equipment For On-Call Rubberized Slurry Seal (REAS) Type I and II at Various Locations for the City of Garden Grove.

CONTRACTOR is qualified by virtue of experience, training, education, and expertise to accomplish services.

AGREEMENT

THE PARTIES MUTUALLY AGREE AS FOLLOWS:

4.0 **Compensation.** CONTRACTOR shall be compensated as follows:
Compensation under this agreement shall be a Not to exceed (NTE) amount of Four Hundred Twelve Thousand dollars (\$412,000.00) per year, payable in arrears. Payment for work under this Agreement shall be made per invoice for work completed. All work shall be in accordance with Bid No. S-1028 and the Technical Specification Attachment "A" and Bid No. S-1029 and the Technical Specification in Attachment "B".

Pricing shall remain firm for the first year performance period. For the second year, Contractor may request an increase for material only. Contractor may request pricing increase prior to the signing of the option years. Any increase shall be based on the amount in the increase or decrease during the previous twelve (12) months in the Los Angeles, Anaheim, and Riverside All Urban Consumers Index. To determine the percent increase or decrease, the term "previous twelve months" shall mean the twelve-month period ending March 31 of that year, or if not available, the prior month.

- 4.1 General Conditions. CONTRACTOR certifies and agrees that all the terms, conditions and obligations of the Contract Documents as hereinafter defined, the location of the job site, and the conditions under which the work is to be performed have been thoroughly reviewed, and enters into this Contract based upon CONTRACTOR'S investigation of all such matters and is in no way relying upon any opinions or representations of CITY. It is agreed that this Contract represents the entire agreement. It is further agreed that the Contract Documents including the Notice Inviting Bids, Special Instructions to Bidders, if any, and Contractor's Proposal, are incorporated in this Contract by reference, with the same force and effect as if the same were set forth at length herein, and that CONTRACTOR and its subcontractors, if any, will be and are bound by any and all of said Contract Documents insofar as they relate in any part or in any way, directly or indirectly, to the work covered by this Contract.
 - "Project" as used herein defines the entire scope of the work covered by all the Contract Documents. Anything mentioned in the Specifications and not indicated in the Plans, or indicated in the Plans and not mentioned in the Specifications, shall be of like effect as if indicated and mentioned in both. In case of discrepancy in the Plans or Specifications, the matter shall be immediately submitted to City's Engineer, without whose decision CONTRACTOR shall not adjust said discrepancy save only at CONTRACTOR'S own risk and expense. The decision of the Engineer shall be final.
- 4.2 Materials and Labor. CONTRACTOR shall furnish, under the conditions expressed in the Plans and Specifications, at CONTRACTOR'S own expense, all labor and materials necessary, except such as are mentioned in the Specifications to be furnished by the CITY, to complete the project, in good workmanlike and substantial order. If CONTRACTOR fails to pay for labor or materials when due, CITY may settle such claims by making demand upon the surety to this Agreement. In the event of the failure of refusal of the surety to satisfy said claims, CITY may settle them directly and deduct the amount of payments from the Contract price and any amounts due to CONTRACTOR. In the event CITY receives a stop notice from any laborer or material supplier alleging non-payment by CONTRACTOR, CITY shall be entitled to deduct all of its costs and expenses incurred relating thereto, including but not limited to administrative and legal fees.
- 4.3 <u>Project</u>. The PROJECT is described as: Furnish all labor, Material, and Equipment for On-Call Rubberized Slurry Seal (REAS) Type I and II at various locations for the City of Garden Grove.
- 4.4 Plans and Specifications. The work to be done is described in a set of detailed Plans and Specifications entitled: Furnish all labor, Material, and Equipment for On-Call Rubberized Slurry Seal (REAS) Type I and II at various locations for the City of Garden Grove. Said Plans and Specifications and any revisions, amendments or addenda thereto are attached

hereto and incorporated herein as part of this Contract and referred to by reference. The work to be done must also be in accordance with the General Provisions, Standard Specifications and Standard Plans of City which are also incorporated herein and referred to by reference.

- 4.5 <u>Time of Commencement and Completion</u>. The performance period shall be for two (2) years from Notice to proceed thru June 30, 2010. The contract may be extended one year at a time, at the sole option of the city, to a maximum of five (5) years. CONTRACTOR agrees to commence the Project within TEN (10) calendar days from the date set forth in the "Notice to Proceed".
- 4.6 Time is of the Essence. Time is of the essence of this Contract. As required by the Contract Documents, CONTRACTOR shall prepare and obtain approval of all shop drawings, details and samples, and do all other things necessary and incidental to the prosecution of CONTRACTOR'S work in conformance with an approved construction progress schedule. CONTRACTOR shall coordinate the work covered by this Contract with that of all other contractors, subcontractors and of the CITY, in a manner that will facilitate the efficient completion of the entire work in accordance with Section 4.5 herein. CITY shall have complete control of the premises on which the work is to be performed and shall have the right to decide the time or order in which the various portions of the work shall be installed or the priority of the work of other subcontractors, and, in general, all matters representing the timely and orderly conduct of the work of CONTRACTOR on the premises.
- 4.7 Excusable Delays. CONTRACTOR shall be excused for any delay in the prosecution or completion of the Project caused by acts of God; inclement weather; damages caused by fire or other casualty for which CONTRACTOR is not responsible; and act, neglect or default of CITY; failure of CITY to make timely payments to CONTRACTOR; late delivery of materials required by this CONTRACT to be furnished by CITY; combined action of the workers in no way caused by or resulting from default or collusion on the part of CONTRACTOR; a lockout by CITY; or any other delays unforeseen by CONTRACTOR and beyond CONTRACTOR'S reasonable control.

City shall extend the time fixed in Section 4.5 herein for completion of the Project by the number of days CONTRACTOR has thus been delayed, provided that CONTRACTOR presents a written request to CITY for such time extension within fifteen (15) days of the commencement of such delay and CITY finds that the delay is justified. CITY'S decision will be conclusive on the parties to this Contract. Failure to file such request within the time allowed shall be deemed a waiver of the claim by CONTRACTOR.

No claims by CONTRACTOR for additional compensation or damages for delays will be allowed unless CONTRACTOR satisfies CITY that such delays were unavoidable and not the result of any action or inaction of CONTRACTOR and that CONTRACTOR took all available measures to mitigate such damages.

Extensions of time and extra compensation as a result of incurring undisclosed utilities will be determined in accordance with Section 9-103A of the State of California Department of Transportation Standard Specifications. The CITY'S decision will be conclusive on all parties to this Contract.

4.8 Extra Work. The Contract price includes compensation for all work performed by CONTRACTOR, unless CONTRACTOR obtains a written change order signed by a designated representative of CITY specifying the exact nature of the extra work and the amount of extra compensation to be paid all as more particularly set forth in Section 4.9 hereof. CITY shall extend the time fixed in Section 4.5 for completion of the Project by the number of days reasonably required for CONTRACTOR to perform the extra work, as determined by CITY'S Engineer. The decision of the Engineer shall be final.

4.9 Changes in Project.

- **4.9.1** CITY may at any time, without notice to any surety, by written order designated or indicated to be a change order, make any change in the work within the general scope of the Contract, including but not limited to changes:
 - a. in the Specifications (including drawings and designs);
 - b. in the time, method or manner of performance of the work;
 - in the City-furnished facilities, equipment, materials, services or site; or
 - d. directing acceleration in the performance of the work.
- 4.9.2 A change order shall also be any other written order (including direction, instruction, interpretation or determination) from the CITY which causes any change, provided CONTRACTOR gives the CITY written notice stating the date, circumstances and source of the order and that CONTRACTOR regards the order as a change order.
 - **4.9.3** Except as provided in this Section 4.9, no order, statement or conduct of the CITY or its representatives shall be treated as a change under this Section 9 or entitle CONTRACTOR to an equitable adjustment.
 - 4.9.4 If any change under this Section 4.9 causes an increase or decrease in CONTRACTOR'S actual, direct cost or the time required to perform any part of the work under this Contract, whether or not changed by any order, the CITY shall make an equitable adjustment and modify the Contract in writing. Except for claims based on defective specifications, no claim for any change under paragraph (4.9.2) above shall be allowed for any costs incurred more than 20 days before the CONTRACTOR gives written notice as required in paragraph (4.9.2). In the case of defective specifications for which the CITY is responsible, the equitable adjustment shall include any increased direct cost CONTRACTOR

- reasonably incurred in attempting to comply with those defective specifications.
- **4.9.5** If CONTRACTOR intends to assert a claim for an equitable adjustment under this Section 5.9, it must, within thirty (30) days after receipt of a written change order under paragraph (4.9.1) or the furnishing of a written notice under paragraph (4.9.2), submit a written statement to the CITY setting forth the general nature and monetary extent of such claim. The CITY may extend the 30-day period. CONTRACTOR may include the statement of claim in the notice under paragraph (4.9.2) of this Section 4.9.
- **4.9.6** No claim by CONTRACTOR for an equitable adjustment shall be allowed if made after final payment under this Agreement.
- 4.9.7 CONTRACTOR hereby agrees to make any and all changes, furnish the materials and perform the work that CITY may require without nullifying this Contract. CONTRACTOR shall adhere strictly to the Plans and Specifications unless a change therefrom is authorized in writing by the CITY. Under no condition shall CONTRACTOR make any changes to the Project, either in additions or deduction, without the written order of the CITY and the CITY shall not pay for any extra charges made by CONTRACTOR that have not been agreed upon in advance in writing by the CITY. CONTRACTOR shall submit immediately to the CITY written copies of its firm's cost or credit proposal for change in the work. Disputed work shall be performed as ordered in writing by the CITY and the proper cost or credit breakdowns therefore shall be submitted without delay by CONTRACTOR to CITY.
- 4.10 Liquidated Damages for Delay. The parties agree that if the total work called for under this Contract, in all parts and requirements, is not completed within the time specified in Section 4.5 herein, plus the allowance made for delays or extensions authorized under Section 4.7, 4.8 and 4.9 herein, the CITY will sustain damage which would be extremely difficult and impractical to ascertain. The parties therefore agree that CONTRACTOR will pay to CITY the sum of two hundred and fifty dollars (\$250.00) per day for each and every calendar day during which completion of the Project is so delayed. CONTRACTOR agrees to pay such liquidated damages and further agrees that CITY may offset the amount of liquidated damages from any moneys due or that may become due CONTRACTOR under the Contract.
- 4.11 Contract Price and Method of Payment. CITY agrees to pay and the CONTRACTOR agrees to accept as full consideration for the faithful performance of this Contract, subject to any subsequent additions or deductions as provided in approved change orders, the sum as itemized in the bid proposal. Progress payments shall be made to the CONTRACTOR per month for each successive month as the work progresses. The CONTRACTOR

shall be paid such sum as will bring the total payments received since the commencement of the work up to ninety percent (90%) of the value of the work completed, less all previous payments, provided that the CONTRACTOR submits the request for payment prior to the end of the day required to meet the payment schedule. The CITY will retain ten percent (10%) of the amount of each such progress estimate and material cost until 30 days after the recordation of the Notice of Completion.

Payments shall be made on demands drawn in the manner required by law, accompanied by a certificate signed by the CITY'S Engineer, stating that the work for which payment is demanded has been performed in accordance with the terms of the Contract. Partial payments of the Contract price shall not be considered as an acceptance of any part of the work.

- 4.12 Substitution of Securities in Lieu of Retention of Funds. Pursuant to California Public Works Contract Code Section 22300, the CONTRACTOR will be entitled to post approved securities with the CITY or an approved financial institution in order to have the CITY release funds retained by the CITY to ensure performance of the Contract. CONTRACTOR shall be required to execute an addendum to this Contract together with escrow instructions and any other documents in order to effect this substitution.
- **4.13 Completion.** CITY may require affidavits or certificates of payment and/or releases from any subcontractor, laborer or material supplier in connection with Stop Notices which have been filed under the provisions of the statutes of the State of California.

4.14 Contractor's Employee Compensation.

- 4.14.1 General Prevailing Rate. CITY has ascertained from the State of California Director of Industrial Relations, the general prevailing rate of per diem wages and the general prevailing rate for legal holiday and over time work in the locality in which the work is to be performed for each craft or type of work needed to execute this Contract, and copies of the same are on file in the Office of the City Engineer. The CONTRACTOR agrees that not less than said prevailing rates shall be paid to workers employed on this public works contract as required by Labor Code Section 1774 of the State of California.
- 4.14.2 Forfeiture for Violation. CONTRACTOR shall, as a penalty to the CITY, forfeit fifty dollars (\$50.00) for each calendar day or portion thereof for each worker paid (either by the CONTRACTOR or any subcontractor under it) less than the prevailing rate of per diem wages as set by the Director of Industrial Relations, in accordance with Sections 1770-1780 of the California Labor Code for the work provided for in this Contract, all in accordance with Section 1775 of the Labor Code of the State of California.

- **4.14.3** Travel and Subsistence Pay. Section 1773.8 of the Labor Code of the State of California, regarding the payment of travel and subsistence payments, is applicable to this Contract and CONTRACTOR shall comply therewith.
- **4.14.4 Apprentices.** Section 1777.5, 1777.6 and 1777.7 of the Labor Code of the State of California, regarding the employment of apprentices is applicable to this Contract and the CONTRACTOR shall comply therewith if the prime contract involves thirty thousand dollars (\$30,000.00) or more or twenty (20) working days, or more; or if contracts of specialty contractors not bidding for work through the general or prime contractor are two thousand dollars (\$2,000.00) or more for five **(5)** working days or more.
- 4.14.5 Workday. In the performance of this Contract, not more than eight (8) hours shall constitute a day's work, and CONTRACTOR shall not require more than eight (8) hours of labor in a day from any person employed by him thereunder except as provided in paragraph (4.14.2) above. CONTRACTOR shall conform to Article 3, Chapter 1, Part 7 (Sections 1810 et sep.) of the Labor Code of the State of California and shall forfeit to the CITY as a penalty, the sum of twenty-five dollars (\$25.00) for each worker employed in the execution of this Contract by CONTRACTOR or nay subcontractor for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one week in violation of said Article. CONTRACTOR shall keep an accurate record showing the name and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the Project.
- 4.14.6 Records of wages: Inspection. CONTRACTOR agrees to maintain accurate payroll records showing the name, address, social security number, work classification, straight-time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by it in connection with the Project and agrees to require that each of its subcontractors does the same. All payroll records shall be certified as accurate by the applicable contractor or subcontractor or its agent have authority over such matters. CONTRACTOR further agrees that its payroll records and those of its subcontractors shall be available to the employee or employee's representative, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards and shall comply with all the provisions of Labor Code Section 1776, in general.

4.15 Surety Bonds. CONTRACTOR shall, upon entering into performance of this Agreement, furnish bonds in the amount of one hundred percent (100%) of the Contract price bid, to guarantee the faithful performance of the work, and the other in the amount of one hundred percent (100%) of the Contract price bid to guarantee payment of all claims for labor and materials furnished. This Contract shall not become effective until such bonds are supplied to and approved by the CITY. The Surety Company must have an AM Best rating of A-VII or better.

4.16 Insurance.

- **4.16.1** CONTRACTOR is also aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers' Compensation or undertake self-insurance with provisions of that Code and will comply with such provisions before commencing the performance of the work of this Contract.
- 4.16.2 CONTRACTOR and all subcontractors will carry workers' compensation insurance for the protection of its employees during the progress of the work. The insurer shall waive its rights of subrogation against the CITY, its officers, agents and employees and shall issue an endorsement to the policy evidencing same.
- 4.16.3 CONTRACTOR shall at all times carry, for all operations hereunder policies of insurance for: (1) bodily injury, including death, and property damage liability insurance; (2) auto liability including mobile equipment if any, for bodily injury and property damage coverage; (3) and builders' all risk insurance. All insurance coverage shall be in amounts specified by CITY in Section 5.16.4 Insurance Requirements. CONTRACTOR shall provide evidence of insurance coverage by the issuance of a certificate of insurance and endorsements in a form prescribed by the CITY. Policies shall be underwritten by insurance companies satisfactory to CITY for all operations, subcontract work, contractual obligations, on-going, products and completed operations, all hired, leased, owned and non-owned vehicles., and mobile equipment if any. Said insurance coverage obtained by the CONTRACTOR, excepting workers' compensation coverage, shall name the CITY, its Officers, Agents, Employees, Engineers, and Consultants for this Contract, and all public agencies from whom permits will be obtained and their Directors, Officers, Agents and Employees, as determined by the CITY, as additional insured on said policies.

For any claims related to this Agreement, CONTRACTOR'S insurance coverage shall be primary insurance as respects CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees,

agents, or volunteers shall by excess of the CONTRACTOR'S insurance and shall not contribute with it

4.16.4 Before CONTRACTOR performs any work at, or prepares or delivers materials to, the site of construction, CONTRACTOR shall furnish certificates of insurance and endorsements evidencing the foregoing insurance coverage and such certificates of insurance and endorsements shall provide the name and policy number of each carrier and that the insurance is in force and will not be canceled without thirty (30) days written notice to the CITY. CONTRACTOR shall maintain all of the foregoing insurance coverage in force until the work under this Contact is satisfactorily and fully completed. The requirement for carrying the foregoing insurance shall not derogate from the provisions for indemnification of CITY by Contractor under Section 4.17 of this Notwithstanding nor diminishing the obligations of CONTRACTOR with respect to the foregoing, CONTRACTOR shall subscribe for and maintain in full force and effect during the life of this Contract, the following insurance in amounts not less than the amounts specified and issued by a company having a Best's Guide Rate of A-Class VII or better (claims made and modified occurrence policies are not acceptable):

-Workers' Compensation

<u>In accordance with the</u> <u>Workers' Compensation Act of</u> the State of California.

-Commercial General
Liability including mobile
equipment, if any, written
on a per occurrence basis:
(Claims made and modified
policies are not acceptable)

\$2,000,000 per occurrence, if any,

-Automobile Liability
including all owned, nonowned, leased, hired and
mobile equipment, if any,
written on a per occurrence
basis

\$2,000,000 combined single limit

-Builders All Risk Insurance

CITY or its representatives shall at all times have the right to inspect and receive the original or a certified copy of all said policies of insurance, including certificates of insurance and endorsements. CONTRACTOR shall pay all of the premiums on the insurance hereinabove and is required to maintain such insurance coverage during the term of the contract.

4.17 Risk and Indemnification. All work covered by this Contract done at the site of the Project or in preparing or delivering materials to the site shall be at the risk of CONTRACTOR alone. CONTRACTOR agrees to save, indemnify and keep CITY, its Officers, Agents, Employees, Engineers, and Consultants for this Contract, and all public agencies from whom permits will be obtained ant their directors, Officers, Agents and Employees harmless against any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (CONTRACTOR'S employees included) and damage to property, arising directly or indirectly out of the obligations herein undertaken or out of the operations conducted by CONTRACTOR, save and except claims or litigation arising through the sole negligence or sole willful misconduct of CITY and will make good to reimburse CITY for any expenditures, including reasonable attorneys' fees CITY may incur by reason of such matters, and if requested by CITY, will defend any such suits at the sole cost and expense of CONTRACTOR.

4.18 Termination.

- 4.18.1 This Contract may be terminated in whole or in part in writing by the CITY for its convenience, provided that the CONTRACTOR is given (1) not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate, and (2) an opportunity for consultation with the terminating party prior to termination. Termination of contract shall conform to Section 8-1.11 of the State of California, Department of Transportation Standard Specifications.
- 4.18.2 If termination for default or convenience is effected by the CITY, an equitable adjustment in the price provided for in this Contract shall be made, but (1) no amount shall be allowed for anticipated profit on unperformed services or other work, and (2) any payment due to the CONTRACTOR at the time of termination may be adjusted to cover any additional costs to the CITY because of the CONTRACTOR'S default. The equitable adjustment for any termination shall provide for payment to the CONTRACTOR for services rendered and expenses incurred in accordance with section 8-1.11 of the State of California, Department of Transportation Standard Specifications.
- **4.18.3** Upon receipt of a termination action under paragraph (4.18.1) or (4.18.2) above, the CONTRACTOR shall (1) promptly discontinue all

affected work (unless the notice directs otherwise), and (2) deliver or otherwise make available to the CITY all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the CONTRACTOR in performing this Contract whether completed or in process.

- **4.18.4** Upon termination under paragraphs (4.18.1) and (4.18.2) above, the CITY may take over the work and may award another party an agreement to complete the work under this Contract.
- **4.19 Warranty.** The CONTRACTOR agrees to perform all work under this Contract in accordance with the CITY'S designs, drawings and specifications.

The CONTRACTOR guarantees for a period of one (1) year from the date of the notice of completion of the work that the completed work is free from all defects due to faulty materials, equipment or workmanship and that he shall promptly make whatever adjustments or corrections which may be necessary to cure any defects, including repairs or any damage to other parts of the system resulting from such defects. The CITY shall promptly give notice to the CONTRACTOR of observed defects. In the event that the CONTRACTOR fails to make adjustments, repairs, corrections or other work made necessary by such defects, the CITY may do so and charge the CONTRACTOR the cost incurred. The performance bond shall remain in full force and effect through the quarantee period.

The CONTRACTOR'S obligations under this clause are in addition to the CONTRACTOR'S other express or implied assurances provided under this Contract and in no way diminish any other rights that the CITY may have against the CONTRACTOR for faulty materials, equipment or work.

Attorneys' Fees. If any action at law or in equity is necessary to enforce or interpret the terms of this Contract, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which it may be entitled. If any action is brought against the CONTRACTOR or any subcontractor to enforce a Stop Notice or Notice to Withhold, which named the CITY as a party to said action, the CITY shall be entitled to reasonable attorneys' fees, costs and necessary disbursements arising out of the defense or such action by the CITY. The CITY shall be entitled to deduct its costs for any Stop Notice filed, whether court action is involved or not.

4.21 Notices. Any notice required or permitted under this Contract may be given by ordinary mail at the address set forth below. Any party whose address changes shall notify the other party in writing.

To CITY:

City of Garden Grove

City Attorney

11222 Acacia Parkway

Garden Grove, California 92840

To CONTRACTOR: Pavement Coatings Co.

Attention: Doug Ford, President

P.O. Box 1491 Cypress, CA 90630

- **4.22.** Payment of Taxes: The contract prices paid for the work shall include full compensation for all taxes which CONTRACTOR is required to pay, whether imposed by Federal, State or local government.
- **4.23** <u>Safety Provisions</u>: CONTRACTOR shall conform to the rules and regulations established by the California Division of Industrial Safety.

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(Agreement Signature Block On Next Page)

IN WITNESS THEREOF, these parties have executed this Project Agreement on the day and year shown below.

Date:	"CITY CITY OF GARDEN GROVE
	By: City Manager
ATTEST:	
City Clerk	
Date:	"CONTRACTOR" Pavement Coatings Co.
	Contractor's State Lic. No. 303609
	Expiration Date: 9-30-08 By:BOUG FORD President
	Title:
	If CONTRACTOR is a corporation, a Corporate Resolution and/or Corporate Seal is required. If a partnership, Statement of Partnership must be submitted to the CITY.

APPROVED AS TO FORM:

Garden Grove City Attorne

SECTION 2 - PROPOSAL

THE HONORABLE MAYOR AND CITY COUNCIL CITY OF GARDEN GROVE 11222 ACACIA PARKWAY GARDEN GROVE, CALIFORNIA 92840

To: THE HONORABLE MAYOR AND CITY COUNCIL

The undersigned having carefully examined the Plans and Specifications to: Furnish All Labor, Material And Equipment For On-Call Rubberized Slurry Seal, Type I, (REAS) at Various Locations for the City of Garden Grove.

Lead-time for this service is critical. CONTRACTOR agrees to commence the Project with TEN (10) calendar days from the date set forth in the "Notice to Proceed"

Note: On-Call" slurry Seal Service at various City of Garden Grove Locations and will be on an as-needed basis during the two (2) years performance period. The City has budgeted approximately \$200,000.00 per year for this work.

Quantities indicated are the City's best estimate of the total quantities required during the performance period, but actual quantities required may be greater or less than those indicated below. Therefore the successful bidder shall agree to hold quoted prices firm during the performance period, whether total purchase quantities are greater or less than the quantities estimated.

Lead-time for this service is critical. CONTRACTOR agrees to commence the Project with TEN (10) calendar days from the date set forth in the "Notice to Proceed"

HEREBY PROPOSE to furnish all labor, materials, equipment and transportation, and do all the work required to complete work in accordance with the Plans and Specifications for the sum of:

BID PROPOSAL (TYPE I REAS)

Item No.	Estimated Quantity	Unit Price	Extended Total Cost
1	1,000,000 Sq. Ft.	\$ 0.194 /Sq. ft.	\$ 194,000.00
	Total Cost \$ 194,0	00.00	

ONE HUPPAED NINETY FORER THOUSAND DOLLARS

(Amount written in words) Note: In case of discrepancy between the words and figures, the words prevail. The above bid price includes all applicable taxes for the pricing Proposed in this submittal. In case of error in the extension(s) in the Extended Total column, the unit price(s) shall govern.

IFB No S-1028 6

"ATTACHMENT A"

IFB No. S-1028

TECHNICAL SPECIFICATIONS

FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT FOR ON-CALL RUBERRIZED SLURRY SEAL (REAS) AT VARIOUS LOCATIONS IN THE CITY OF GARDEN GROVE

This project shall consist of furnishing and placing of Type I or Type II Rubberized Emulsion Aggregate Slurry Seal (REAS) on various streets within the City of Garden Grove on a "per square foot" basis. This is for an "ON-CALL" service on various streets throughout the City and on various projects/phases throughout the term of the contract. Minimum quantities per project will be 200,000 sq. ft or the compensated equivalent of 200,000 sq.ft. per project. It is anticipated that Type II will be used on the first phase and the actual quantity of the first phase will be approximately 533,000 sq. ft.

SPECIAL PROVISIONS

1. WORK TO BE DONE

The work shall consist of formulating a mix design, cleaning pavement surfaces, mixing and applying a crumb rubber asphalt slurry-seal surface treatment, and protecting the completed slurry seal until set. The completed slurry seal shall leave a homogenous mat, adhere firmly to the prepared surface, and have a skid resistant surface texture. All work shall be in accordance with the "Greenbook", Standard Specifications for Public Works Construction, latest edition, unless otherwise described herein. All work shall be done in a workman-like manner, within the prescribed time limits, and as directed by the engineer. As used throughout this specification, the term "Engineer" shall mean the Director of Public Works or his designated representative.

ENGINEERING AND CONTROL

Control of the work shall be in accordance with the following:

A. The Contractor shall give twenty-four (24) hours notice, in writing, prior to requesting the City Engineer, or his designated agent's services, for laying out any portion of the work.

- B. In case of conflict between the various contract documents, the order of precedence shall be as follows:
 - 1) General Conditions
 - 2) Special Provisions
 - 3) Construction Plans
 - 4) Caltrans Traffic Manual (per latest edition)
 - 5) The Greenbook Standard Specifications for Public Works Construction (per latest edition)
- C. The standard specifications shall apply to all phases of work not controlled by documents 1 through 5 above.
- D. In case of conflict between the specifications and the instructions and conditions of the invitation to bid, the specifications shall have precedence.

2. LABORATORY EVALUATION AND REPORT

General:

Before work commences, the Contractor shall submit a signed original of a mix design covering the specific materials to be used on the project. This design must have been performed by a qualified, independent laboratory. Previous lab reports covering the exact materials to be used may be accepted provided they were made during the calendar year. Once the materials are approved, no substitution will be permitted unless first tested and approved by the laboratory preparing the mix design.

600-3 RUBBERIZED EMULSION-AGGREGATE SLURRY

- **600-3.1 Description.** This work shall consist of formulating a mix design, cleaning pavement surfaces, mixing and applying a crumb rubber asphalt slurry-seal surface treatment, and protecting the completed slurry seal until set. All work shall be in accordance with this specification, the dimension, and details shown on the plans, and as approved by the Engineer.
- **600-3.2 Materials.** Rubberized Emulsion-Aggregate Slurry (REAS) shall consist of Rubberized Polymer Modified Emulsion (RPME) and aggregate. Materials for REAS shall conform to the following, immediately prior to mixing.
- **600-3.2.1 Rubberized Polymer Modified Emulsion.** The RPME shall be a slow set or a quick-set type of emulsion as determined by the Engineer. RPME shall contain asphalt, crumb rubber, and polymer modifiers.

- **600-3.2.2 Polymer Modifier**. Polymer modifier shall be latex which is added at a minimum of two percent by weight of the RPME.
- **600-3.2.3 Crumb Rubber.** The material shall be granulated scrap tire rubber free from fabric wires and other contaminants. Rubber shall be dry and free flowing. Calcium carbonate or talc may be added to a maximum of four percent by weight of rubber to prevent rubber particles from sticking together. The rubber shall have a specific gravity between 1.15 and 1.20. 100% of the rubberized material shall pass a 1.18mm (#16) sieve, 95% shall pass a 900 $\Box m$ (#20) sieve, and a maximum of 2 percent shall pass a number 75 $\Box m$ (# 200) sieve. The RPME shall contain between 66 g/L (0.55 lbs/gal.) and 78 g/L (0.65 lbs/gal.) of crumb rubber.

600-3.2.4 Quality Requirements. Manufacturer's shall certify that materials meet the following requirements:

TABLE 600-3.2.4(A) TESTS ON RUBBERIZED POLYMER MODIFIED EMULSION

2,500 min. 20,000 max.
50 min.
2.0 max. ¹
L.0 kg/L (8.33 lbs/gal) min. L.05 kg/L (8.75 lbs/gal) max.
20 min 40 max.
75 min.
2(2. L.

^{1.} Sieve test of original emulsion is 0.10

TABLE 600-3.2.4 (B) TEST ON POLYMER MODIFIER

Total Solids (residue) ASTM D1417	60% min.
Total Solids (residue) ASTIT DETE	

TABLE 600-3.2.4 (C) COMPOSITION OF REAS

Aggregate Type	RPME % of Dry Aggregate Weight	Residual RPME % of Dry Aggregate Weight	kg of Dry Aggregate per L of RPME	Pounds of Dry Aggregate per Gallon of RPME
Fine Slurry Aggregate	60 - 80	30 - 40	1.27 - 1.70	10.6 - 14.2
Type I Slurry Aggregate	50 - 75	25 - 38	1.35 - 2.0	11.3 - 17.0
Type II Slurry Aggregate	28 - 35	14 - 18	2.90 - 3.60	24 - 30

600-3.2.5 Aggregate. The aggregate shall consist of sound and durable natural or manufactured sand, crushed stone or crushed stone and rock dust, or a combination thereof, free of deleterious amounts of organic material, mica, and other substances not suitable for the purpose. Smooth-textured sand of less than 1.25 percent water absorption, as tested by ASTM C128, shall not exceed 50 percent of the total combined aggregate. Aggregate retained on the 300 □m sieve (No. 50) shall be 100 percent crushed.

The combined aggregate shall meet the requirements of Table 203.5.2 (B) prior to any chemical additions.

The combined aggregate shall conform to the gradation shown in Table 600-3.2.5 (A) when tested in accordance with ASTM C136.**TABLE 600-3.2.5 (A)**

Payment reduction for noncompliance shall conform to 302-4.6.1 and 302-4.6.2.

The laboratory report will show the results of tests performed on the individual materials, comparing their values to those required by this specification. The report will provide the following information on the slurry seal mixture:

Slurry Seal Consistency	ISSA	T106	2-3 cm
Excess Asphalt	ISSA	T109	50-70 gms/sq ft
West Stripping Test	ISSA	T114	Pass
Compatibility	ISSA	T115	*Pass
Quick Set Emulsion	ISSA	T102	**Pass
West Track Abrasion	ASTM	D3910	75 gms/sq ft max

- Mixing tests must pass at the maximum expected air temperature
- ** Using job aggregates

The laboratory shall further report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect). The laboratory report must clearly show the proportions of aggregate, mineral filler (min and max), additive(s) (usage) and asphalt based on the dry aggregate weight.

3. EQUIPMENT

General:

Prior to the award of the contract, the apparent successful bidder shall allow inspection, by City personnel, of the vehicles designated for the project. Those vehicles that pass inspection will have their I.D. numbers recorded and will be the only vehicles allowed to work on the project. Quality and safety of equipment will have a bearing on the award of the contract.

All equipment, tools and machines used in the performance of this work shall be maintained in satisfactory working order at all times.

4. MACHINE CALIBRATION, VERIFICATION AND APPLICATION RATE

Weight Scales:

The Contractor shall provide a scale or appropriate weighing device at the project site or an alternate site approved by the City. The weighing device shall show the net weight of the aggregate bins on each slurry machine before the machine and product will be approved for applying slurry on the project.

Calibration:

Each slurry mixing unit to be used in performance of the work shall be calibrated in the presence of the Engineer prior to construction. Previous calibration documentation covering the exact materials to be used may be accepted provided they were made during the calendar year. The documentation shall include an individual calibration of each material at various settings, which can be related to the machine's metering device(s). No machine will be allowed to work on the project until the calibration has been completed and/or accepted.

7. LIMITATIONS

Weather:

Slurry shall not be applied when the atmospheric temperature is less than 50° F (10° C). The mixture shall not be applied when weather conditions prolong opening to traffic beyond a reasonable time.

Work Hours:

Once work has started, the Contractor shall diligently perform the work to completion.

No sealant shall be applied before 7:30 AM and must be able to support traffic by 4 PM.

The legal work day shall consist of eight (8) hours, 7:30 AM to 4 PM. Should the Contractor receive permission from the Engineer to work overtime, all inspection costs as a result of the Contractor's overtime work shall be paid by the Contractor.

The Garden Grove Police Department has been enforcing weight limits on slurry seal equipment requiring the operators to strike off the load. Overweight permits will be made available but will only apply to the City of Garden Grove streets.

8. NOTIFICATION, POSTING AND SCHEDULE CHANGES

Notification and Posting: The Contractor shall deliver "Notice to Residents" 48 hours prior to the sealing of the street. The posting of "No Parking Tow Away" signs 48 hours prior to sealing, and their subsequent removal, will be performed by the Contractor. When these signs are removed by wind or vandals during the course of the slurry operation, the Contractor shall repost them.

Schedule Changes: Requests for changes in the schedule shall be submitted by the Contractor to the City for approval at least 48 hours prior to the scheduled sealing of the streets affected. Failure to meet the notified schedule requires that the contractor immediately notify residents of the cancellation for the day's work and reschedule seal coating of affected area. The Contractor shall then resubmit Notice to Residents 24 hours prior to sealing of street. The Contractor may use the sample letter or submit his own letter for prior approval to the City.

9. RESPONSIBILITY

The City will perform preliminary crack sealing and patching.

The City will be responsible for the advance notification of residents and businesses.

The City will re-stripe all traffic and pavement markings at no cost to the Contractor.

The City will supply the necessary water to the Contractor without cost.

The Contractor will sweep the streets to be sealed prior to applying slurry.

The Contractor will place barricades, delineators, signs, flashers, and traffic control devices.

The Contractor will provide flagmen while Contractor slurry operations are in progress.

The City of Garden Grove shall not be held responsible for the care or protection of any material or parts of the work prior to the Final Acceptance.

The Contractor shall, at the direction of the Engineer, repair and reseal all areas of the streets which have not been sealed properly or completely at no cost to the City.

10. TRAFFIC CONTROL

Maintenance of Traffic:

The Contractor shall accomplish all work so that at least one 10' (ten foot) lane shall remain open in each direction on major streets.

The Contractor shall be required to provide and maintain all necessary flagmen. The Contractor will provide all necessary traffic control devices.

It is mutually understood that traffic control is paramount in the successful application and cure of crumb rubber asphalt slurry seal, as herein described, and further that the contractor shall have full responsibility to provide adequate means to insure proper protection of the applied slurry seal. Adequate means shall be provided to protect the slurry seal from damage by traffic for a minimum of three hours after application or until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to and be picked up by the tires of vehicles. When doing arterial streets, 4' delineators at a maximum of 100' intervals, connected by twine and hanging streamers shall be used. The City shall supply and maintain an illuminated arrow board device in advance of all work sites on arterial

highways or when designated by the Public Works Director or duly appointed representative.

When necessary to provide vehicular or pedestrian crossing over and/or through the fresh slurry, the Contractor shall furnish and spread sufficient black sand to eliminate tracking or damage to the slurred mixture or to adjacent property. If sand is applied at intersections over fresh slurry for access, the Contractor shall post "Loose Gravel" construction signs. Signs shall be posted from commencements of slurry until all sand has been cleaned from the roadway. The Contractor shall remove all sand by sweeping within 24 hours after opening the street to traffic.

Should the Contractor fail to furnish sufficient precautionary traffic control (flagmen) within one (1) hour after notification by the City, the City shall place the necessary items or personnel and the Contractor shall be billed for said items or personnel.

11. PREPARATION OF THE SURFACE

General:

Surface oil and grease shall be removed or sealed with emulsified gilsonite or an equivalent material approved by the Engineer before the application of the slurry seal.

Prior to applying slurry, all vegetation shall be sprayed with Roundup and removed from cracks in the pavement and joints between the pavement and concrete gutters by the City.

Manholes, valve boxes, drop inlets and other service entrances will be protected from the slurry seal by a suitable method. The Engineer shall approve the surface preparation prior to sealing.

Street Sweeper:

Contractor shall furnish a power street sweeper with operator to clean immediately after any wet sandblasting for paint removal; to clean the asphalt pavement the same day the street is sealed; and when necessary, as deemed by the engineer, sweep the streets showing raveling after the slurry seal has set. The sweeper shall have a steel gutter broom and a rear plastic broom, and three (3) yard minimum capacity hopper. If water is used, cracks will be allowed to dry thoroughly before slurry sealing. The Engineer shall approve the surface preparation prior to sealing.

Manholes, valve boxes, drop inlets and other service entrances will be protected from the slurry seal by a suitable method. The Engineer shall approve the surface preparation prior to sealing.

12. APPLICATION

General:

The surface should be pre-wetted by fogging ahead of the slurry box when required by local conditions. Water used in pre-wetting the surface shall be applied such that the entire surface is damp with no apparent flowing water in front of the slurry box. The rate of application of the fog spray shall be adjusted during the day to suit temperatures, surface texture, humidity and dryness of the pavement surface.

The slurry mixture shall be of the desired consistency upon leaving the mixer and no additional materials shall be added. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader shall be avoided. No lumping, balling or unmixed aggregate shall be permitted. In placing slurry, the slurry machine shall move no faster than 150' a minute, or when chatter marks appear.

No streaks, such as those caused by oversized aggregate, will be left in the finished surface. If excess oversize develops, the job will be stopped until the Contractor proves to the Engineer that the situation has been corrected.

Where the completed slurry is not uniform in color, the street shall be treated to eliminate the color variation at the Contractor's expense. The method of treatment shall be approved by the City.

<u>Joints</u>:

No excessive buildup, uncovered areas or unsightly appearance shall be permitted on longitudinal or transverse joints. An excessive overlap will not be permitted on longitudinal joints. The Contractor shall provide suitable width spreading equipment to produce a minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only in minimum amounts. If half passes are used, they shall not be the last pass of any paved area.

Mix Stability:

The slurry mixture shall possess sufficient stability so that premature breaking of the slurry seal in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading, it shall be

free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

Hand Work:

Areas which cannot be reached with the slurry seal machines shall be surfaced using hand squeegees to provide complete and uniform slurry seal coverage. The area to be handworked shall be lightly dampened prior to mix placement and the slurry worked immediately. Care shall be exercised to leave no unsightly appearance from handwork or to overwork the mix. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

Lines:

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

<u>Clean-up</u>:

All areas, such as manways, gutters and intersections, shall have the slurry seal removed as specified by the Engineer. The contractor shall remove any debris associated with the performance of the work, on a daily basis.

Raised Pavement Markers and Reflectors:

Most streets have pavement markers and reflectors, which will be protected and cleaned by the Contractor to original state by water and soap immediately behind slurry spreader box. A backpack sprayer with sufficient volume and pressure to clean the wet slurry off pavement marker and reflector without damaging surrounding slurry mixture shall be used.

Utilities:

Contractor shall protect and clean all utilities to original state.

Any manhole cover, water valve cover, utility vault cover and/or drainage facility cover found to be inadequately protected and/or cleaned shall be cleaned by means such as sandblasting to remove all slurry material (including material remaining from previous applications) from the metal surface or it shall be replaced by the Contractor at its expense.

13. QUALITY CONTROL

Mix Design:

Refer to section 600-3 of the Standard Specifications.

Materials:

The Engineer may use the recorders and measuring facilities of the slurry seal unit to determine application rates, asphalt emulsion content, mineral filler and additive(s) content for an individual load.

It is the responsibility of the Contractor to check stockpile moisture content and to set the machine accordingly to account for aggregate bulking.

Non-Compliance:

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the Engineer that the conditions have been corrected. If any two successive tests of the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the Engineer that the problems have been corrected and that the machine is working properly.

14. ADDITIONAL COMPENSATION

Contractor may receive additional compensation for material increases based upon The California Statewide Paving Asphalt Price Index when an increase in materials exceeds five percent (5%) for the month in which bid opening for the project occurred. To exercise this option the Contractor must notify the City of its intent by Certified mail prior to initializing any portion of the project(s) affected by the proposed material cost increase(s). The City shall then have the option of increasing the rate of compensation, decreasing the scope of work, or terminating the agreement.

15. PAYMENT

The slurry seal shall be paid at the contract price per square foot of work completed and accepted by the Engineer. The minimum project will be 200,000 sq. ft. In the event that less than 200,000 sq. ft. has been scheduled and requested by City, Contractor shall receive compensation for 200,000 sq. ft. The contract unit price paid for slurry seal will be considered full compensation for furnishing all labor for, protecting and cleaning all utilities and pavement markers, tools, equipment and incidentals and for

doing all work involved in constructing the slurry seal, complete in place, per project, as specified in these specifications and as directed by the Engineer.

16. GUARANTY

The Contractor shall guaranty the work against defective material or workmanship for a period of one year from the date of completion of the contract. Damage due to acts of God or from sabotage and/or vandalism are specifically excepted from the guaranty.

When defective material and/or workmanship are discovered which require repairs to be made under this guaranty, all such work shall be done by the Contractor at his own expense within ten (10) days after written notice of such defects has been given to him by the City. Should the Contractor fail to repair such defective material or workmanship within ten (10) days thereafter, the City may cause the necessary repairs to be made and charge the Contractor with the actual cost of all labor and materials required. In emergencies demanding immediate attention, the City shall have the right to repair the defect and charge the Contractor with the actual cost of all labor and material required. Any repair work performed as herein specified shall be done under the provisions of the original contract specifications.

The Contractor shall arrange to have his Faithful Performance Bond run for a period of one year after the date of completion of the contract to cover his quaranty as set forth above.

SECTION 2 - PROPOSAL

THE HONORABLE MAYOR AND CITY COUNCIL CITY OF GARDEN GROVE 11222 ACACIA PARKWAY GARDEN GROVE, CALIFORNIA 92840

To: THE HONORABLE MAYOR AND CITY COUNCIL

The undersigned having carefully examined the Plans and Specifications to: Furnish All Labor, Material And Equipment For On-Call Rubberized Slurry Seal (REAS), Type II, at Various Locations for the City of Garden Grove.

Lead-time for this service is critical. CONTRACTOR agrees to commence the Project with TEN (10) calendar days from the date set forth in the "Notice to Proceed"

Note: On-Call" slurry Seal Service at various City of Garden Grove Locations and will be on an as-needed basis during the two (2) years performance period. The City has budgeted approximately \$200,000.00 per year for this work.

Quantities indicated are the City's best estimate of the total quantities required during the performance period, but actual quantities required may be greater or less than those indicated below. Therefore the successful bidder shall agree to hold quoted prices firm during the performance period, whether total purchase quantities are greater or less than the quantities estimated.

Lead-time for this service is critical. CONTRACTOR agrees to commence the Project with TEN (10) calendar days from the date set forth in the "Notice to Proceed"

HEREBY PROPOSE to furnish all labor, materials, equipment and transportation, and do all the work required to complete work in accordance with the Plans and Specifications for the sum of:

BID PROPOSAL: (TYPE II REAS)

Item Estimated No. Quantity

Unit Price

Extended Total Cost

1

1,000,000 Sq. Ft.

\$ 0.218 /Sq. ft.

\$ 218,000.00

Total Cost \$ 218,000.00

TWO HUNDRED EIGHTEEN THOUSAND DOLLARS

(Amount written in words) Note: In case of discrepancy between the words and figures, the words prevail. The above bid price includes all applicable taxes for the pricing Proposed in this submittal. In case of error in the extension(s) in the Extended Total column, the unit price(s) shall govern.

IFB No S-1029

ATTACHMENT "B"

IFB No. S-1029

TECHNICAL SPECIFICATIONS

FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT FOR ON-CALL RUBBERIZED SLURRY SEAL (REAS), TYPE II, AT VARIOUS LOCATIONS IN THE CITY OF GARDEN GROVE

This project shall consist of furnishing and placing of Type II Rubberized Emulsion Aggregate Slurry Seal (REAS) on various streets within the City of Garden Grove on a "per square foot" basis. This is for an "ON-CALL" service on various streets throughout the City and on various projects/phases throughout the term of the contract. Minimum quantities per project will be 200,000 sq. ft or the compensated equivalent of 200,000 sq.ft., per project. It is anticipated that Type II will be used on the first phase and the actual quantity of the first phase will be approximately 1,000,000 sq. ft.

SPECIAL PROVISIONS

5. WORK TO BE DONE

The work shall consist of formulating a mix design, cleaning pavement surfaces, mixing and applying a crumb rubber asphalt slurry-seal surface treatment, and protecting the completed slurry seal until set. The completed slurry seal shall leave a homogenous mat, adhere firmly to the prepared surface, and have a skid resistant surface texture. All work shall be in accordance with the "Greenbook", Standard Specifications for Public Works Construction, latest edition, unless otherwise described herein. All work shall be done in a workman-like manner, within the prescribed time limits, and as directed by the engineer. As used throughout this specification, the term "Engineer" shall mean the Director of Public Works or his designated representative.

ENGINEERING AND CONTROL

Control of the work shall be in accordance with the following:

- A. The Contractor shall give twenty-four (24) hours notice, in writing, prior to requesting the City Engineer, or his designated agent's services, for laying out any portion of the work.
- B. In case of conflict between the various contract documents, the order of precedence shall be as follows:
 - 1) General Conditions
 - 2) Special Provisions

- 3) Construction Plans
- 4) Caltrans Traffic Manual (per latest edition)
- 5) The Greenbook Standard Specifications for Public Works Construction (per latest edition)
- C. The standard specifications shall apply to all phases of work not controlled by documents 1 through 5 above.
- D. In case of conflict between the specifications and the instructions and conditions of the invitation to bid, the specifications shall have precedence.

6. LABORATORY EVALUATION AND REPORT

<u>General</u>:

Before work commences, the Contractor shall submit a signed original of a mix design covering the specific materials to be used on the project. This design must have been performed by a qualified, independent laboratory. Previous lab reports covering the exact materials to be used may be accepted provided they were made during the calendar year. Once the materials are approved, no substitution will be permitted unless first tested and approved by the laboratory preparing the mix design.

600-3 RUBBERIZED EMULSION-AGGREGATE SLURRY

- **600-3.1 Description.** This work shall consist of formulating a mix design, cleaning pavement surfaces, mixing and applying a crumb rubber asphalt slurry-seal surface treatment, and protecting the completed slurry seal until set. All work shall be in accordance with this specification, the dimension, and details shown on the plans, and as approved by the Engineer.
- **600–3.2 Materials.** Rubberized Emulsion-Aggregate Slurry (REAS) shall consist of Rubberized Polymer Modified Emulsion (RPME) and aggregate. Materials for REAS shall conform to the following, immediately prior to mixing.
- **600-3.2.1 Rubberized Polymer Modified Emulsion.** The RPME shall be a slow set or a quick-set type of emulsion as determined by the Engineer. RPME shall contain asphalt, crumb rubber, and polymer modifiers.
- **600-3.2.2 Polymer Modifier.** Polymer modifier shall be latex which is added at a minimum of two percent by weight of the RPME.
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material shall pass a 1.18mm (#16) sieve, 95% shall pass a 900 :m (#20) sieve, and a maximum of 2 percent shall pass a number 75 :m (# 200) sieve. The RPME shall contain between 66 g/L (0.55 lbs/gal.) and 78 g/L (0.65 lbs/gal.) of crumb rubber.

600-3.2.4 Quality Requirements. Manufacturer's shall certify that materials meet the following requirements:

TABLE 600-3.2.4(A) TESTS ON RUBBERIZED POLYMER MODIFIED EMULSION

Viscosity, 25° C (77° F), Brookfield, Model RVT #6 Spindle @ 10 RPM (Centipoise)	2,500 min. 20,000 max.
Residue by Evaporation % (ASTM D244)	50 min.
Sieve Test % retained in #20 screen (ASTM D244)	2.0 max. ¹
Weight per Liter (Gallon)	1.0 kg/L (8.33 lbs/gal) min. 1.05 kg/L (8.75 lbs/gal) max.
Penetration of Residue, 25° C (77° F), 100g, 5 sec. ASTM D5	20 min 40 max.
Percent Residue Soluble in Trichloroethylene ASTM D2042	75 min.

^{1.} Sieve test of original emulsion is 0.10

TABLE 600-3.2.4 (B) TEST ON POLYMER MODIFIER

Total Solids (residue) ASTM D1417	60% min.
Total Solids (Testade) ASTITUTIES	

TABLE 600-3.2.4 (C) COMPOSITION OF REAS

Aggregate Type	RPME % of Dry Aggregate Weight	Residual RPME % of Dry Aggregate Weight	kg of Dry Aggregate per L of RPME	Pounds of Dry Aggregate per Gallon of RPME
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600–3.2.5 Aggregate. The aggregate shall consist of sound and durable natural or manufactured sand, crushed stone or crushed stone and rock dust, or a combination thereof, free of deleterious amounts of organic material, mica, and other substances not suitable for the purpose. Smooth-textured sand of less than 1.25 percent water absorption, as tested by ASTM C128, shall not exceed 50 percent of the total combined aggregate. Aggregate retained on the 300 Fm sieve (No. 50) shall be 100 percent crushed.

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Maintenance of Traffic:

The Contractor shall accomplish all work so that at least one 10' (ten foot) lane shall remain open in each direction on major streets.

The Contractor shall be required to provide and maintain all necessary flagmen. The Contractor will provide all necessary traffic control devices.

It is mutually understood that traffic control is paramount in the successful application and cure of crumb rubber asphalt slurry seal, as herein described, and further that the contractor shall have full responsibility to provide adequate means to insure proper protection of the applied slurry seal. Adequate means shall be provided to protect the slurry seal from damage by traffic for a minimum of three hours after application or until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to and be picked up by the tires of vehicles. When doing arterial streets, 4' delineators at a maximum of 100' intervals, connected by twine and hanging streamers shall be used. The City shall supply and maintain an illuminated arrow board device in advance of all work sites on arterial highways or when designated by the Public Works Director or duly appointed representative.

When necessary to provide vehicular or pedestrian crossing over and/or through the fresh slurry, the Contractor shall furnish and spread sufficient black sand to eliminate tracking or damage to the slurred mixture or to adjacent property. If sand is applied at intersections over fresh slurry for access, the Contractor shall post "Loose Gravel" construction signs. Signs shall be posted from commencements of slurry until all sand has been

cleaned from the roadway. The Contractor shall remove all sand by sweeping within 24 hours after opening the street to traffic.

Should the Contractor fail to furnish sufficient precautionary traffic control (flagmen) within one (1) hour after notification by the City, the City shall place the necessary items or personnel and the Contractor shall be billed for said items or personnel.

21. PREPARATION OF THE SURFACE

General:

Surface oil and grease shall be removed or sealed with emulsified gilsonite or an equivalent material approved by the Engineer before the application of the slurry seal.

Prior to applying slurry, all vegetation shall be sprayed with Roundup and removed from cracks in the pavement and joints between the pavement and concrete gutters by the City.

Manholes, valve boxes, drop inlets and other service entrances will be protected from the slurry seal by a suitable method. The Engineer shall approve the surface preparation prior to sealing.

Street Sweeper:

Contractor shall furnish a power street sweeper with operator to clean immediately after any wet sandblasting for paint removal; to clean the asphalt pavement the same day the street is sealed; and when necessary, as deemed by the engineer, sweep the streets showing raveling after the slurry seal has set. The sweeper shall have a steel gutter broom and a rear plastic broom, and three (3) yard minimum capacity hopper. If water is used, cracks will be allowed to dry thoroughly before slurry sealing. The Engineer shall approve the surface preparation prior to sealing.

Manholes, valve boxes, drop inlets and other service entrances will be protected from the slurry seal by a suitable method. The Engineer shall approve the surface preparation prior to sealing.

22. APPLICATION

General:

The surface should be pre-wetted by fogging ahead of the slurry box when required by local conditions. Water used in pre-wetting the surface shall be applied such that the entire surface is damp with no apparent flowing water in front of the slurry box. The rate of application of the fog spray shall be

adjusted during the day to suit temperatures, surface texture, humidity and dryness of the pavement surface.

The slurry mixture shall be of the desired consistency upon leaving the mixer and no additional materials shall be added. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader shall be avoided. No lumping, balling or unmixed aggregate shall be permitted. In placing slurry, the slurry machine shall move no faster than 150' a minute, or when chatter marks appear.

No streaks, such as those caused by oversized aggregate, will be left in the finished surface. If excess oversize develops, the job will be stopped until the Contractor proves to the Engineer that the situation has been corrected.

Where the completed slurry is not uniform in color, the street shall be treated to eliminate the color variation at the Contractor's expense. The method of treatment shall be approved by the City.

Joints:

No excessive buildup, uncovered areas or unsightly appearance shall be permitted on longitudinal or transverse joints. An excessive overlap will not be permitted on longitudinal joints. The Contractor shall provide suitable width spreading equipment to produce a minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only in minimum amounts. If half passes are used, they shall not be the last pass of any paved area.

Mix Stability:

The slurry mixture shall possess sufficient stability so that premature breaking of the slurry seal in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading, it shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

Hand Work:

Areas which cannot be reached with the slurry seal machines shall be surfaced using hand squeegees to provide complete and uniform slurry seal coverage. The area to be hand-worked shall be lightly dampened prior to mix placement and the slurry worked immediately. Care shall be exercised to leave no unsightly appearance from handwork or to overwork the mix. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

<u>Lines:</u>

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

Clean-up:

All areas, such as man ways, gutters and intersections, shall have the slurry seal removed as specified by the Engineer. The contractor shall remove any debris associated with the performance of the work, on a daily basis.

Raised Pavement Markers and Reflectors:

Most streets have pavement markers and reflectors, which will be protected and cleaned by the Contractor to original state by water and soap immediately behind slurry spreader box. A backpack sprayer with sufficient volume and pressure to clean the wet slurry off pavement marker and reflector without damaging surrounding slurry mixture shall be used.

Utilities:

Contractor shall protect and clean all utilities to original state.

Any manhole cover, water valve cover, utility vault cover and/or drainage facility cover found to be inadequately protected and/or cleaned shall be cleaned by means such as sandblasting to remove all slurry material (including material remaining from previous applications) from the metal surface or it shall be replaced by the Contractor at its expense.

23. QUALITY CONTROL

Mix Design:

Refer to section 600-3 of the Standard Specifications.

Materials:

The Engineer may use the recorders and measuring facilities of the slurry seal unit to determine application rates, asphalt emulsion content, mineral filler and additive(s) content for an individual load.

It is the responsibility of the Contractor to check stockpile moisture content and to set the machine accordingly to account for aggregate bulking.

Non-Compliance:

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the Engineer that the conditions have been corrected. If any two successive tests of the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the Engineer that the problems have been corrected and that the machine is working properly.

24. ADDITIONAL COMPENSATION

Contractor may receive additional compensation for material increases based upon The California Statewide Paving Asphalt Price Index when an increase in materials exceeds five percent (5%) for the month in which bid opening for the project occurred. To exercise this option the Contractor must notify the City of its intent by Certified mail prior to initializing any portion of the project(s) affected by the proposed material cost increase(s). The City shall then have the option of increasing the rate of compensation, decreasing the scope of work, or terminating the agreement.

25. PAYMENT

The slurry seal shall be paid at the contract price per square foot of work completed and accepted by the Engineer. The minimum project will be 200,000 sq. ft. In the event that less than 200,000 sq. ft. has been scheduled and requested by City, Contractor shall receive compensation for 200,000 sq. ft. The contract unit price paid for slurry seal will be considered full compensation for furnishing all labor for, protecting and cleaning all utilities and pavement markers, tools, equipment and incidentals and for doing all work involved in constructing the slurry seal, complete in place, per project, as specified in these specifications and as directed by the Engineer.

26. GUARANTY