Agenda Item No.



DATE SUBMITTED

SUBMITTED BY

7/10/24

Public Services

DATE ACTION REQUIRED

7/17/24

IMPERIAL CITY COUNCIL AGENDA ITEM

I. and Auth	CTION: n/Action Regarding Resolution No. 2024-49 Adopting Plans and Specifications orizing Public Bidding for the Pavement Rehabilitation of Various Roads in the perial; Bid No. 2024-06.
DEPARTMENT INVOLVED: Public Se	rvices
BACKGROUND/SUMMARY:	
City Roads Project, Bid No. 2024-06. S	repared plans and specifications for the Pavement Rehabilitation of Various treets identified for improvement are Preble Road, Myrtle Road, La Brucherie Wild Flower, and Victoria Ranch (Maps located at end of specifications).
zones, grinding existing AC pavement,	ray. The work to be done consists of traffic control around the construction HMA leveling course, install ARAM, and ARHM overlay. New pavement materials testing will be provided by the City.
	he Public Contract Code (PCC). The project plans and specifications will be on ed at 420 S. Imperial Ave, Imperial, CA 92251.
FISCAL IMPACT: NOT TO EXC Estimated construction cost is \$2.6M. Funds were discovered during FY budget review w previously known as the Redevelopment Funds ac FY18-19, 19-20, and 20-21. Discussions with Depa reallocate the funds into the General Fund account	thin the Successor Agency Fund (Fund 94), count. Funds were previously mis-allocated on rtment of Finance resulted in an agreement to Such funds (Redevelopment/Successor Agency)
are eligible to be utilized on street maintenance an	
STAFF RECOMMENDATION: approve request	DEPT. INITIALS DD
MANAGER'S RECOMMENDATION:	CITY MANAGER'S INITIALS
MOTION:	
SECONDED: AYES: NAYES: ABSENT:	APPROVED () REJECTED () DISAPPROVED () DEFERRED () REFERRED TO:

RESOLUTION OF THE IMPERIAL CITY COUNCIL ADOPTING PLANS AND SPECIFICATIONS AND AUTHORIZING THE PUBLIC SERVICES DIRECTOR TO PROCEED TO BID FOR CITY PROJECT; BID NO. 2024-06

RESOLUTION NO. 2024-49

WHEREAS, there is a public need for Pavement Rehabilitation on Various Roads in the City of Imperial; Bid no. 2024-06 ("Project"); and

WHEREAS, the City of Imperial Public Services Department has compiled Plans and Specifications, and other applicable bid documents ("Bid Documents") which are on file with the City Clerk.

WHEREFORE, THE IMPERIAL CITY COUNCIL RESOLVES AS FOLLOWS:

- 1. The above recitals are true, correct, and adopted.
- 2. The Bid Documents are hereby approved and adopted.
- 3. A Request for Bids including Plans and Specifications shall be advertised as required by law with a bid submission deadline of: <u>August 15, 2024, at 3:00 PM (PST)</u>
- 4. The Public Services Director and/or their designee is hereby authorized to amend the bid documents as necessary, giving notice as prescribed by law prior to the bid opening deadline, including but not limited to the Calendar of Events and Plans and Specifications, in response to new additive or deductive items.

PASSED AND ADOPTED by Council, City of Imperial, State of California, this <u>17</u>th day of July, 2024 by the following roll call votes:

Robert Amparano Mayor, City of Imperial

ATTEST:

Kristina Shields City Clerk, City of Imperial

CITY OF IMPERIAL Imperial, California

CONTRACT DOCUMENTS AND SPECIFICATIONS FOR

PAVEMENT REHABILITATION OF VARIOUS ROADS IN THE CITY OF IMPERIAL

BID NO. 2024-06



City of Imperial Public Services Department 420 S. Imperial Ave Imperial, Ca 92251 (760) 355-3336

July 2024

CITY OF IMPERIAL TABLE OF CONTENTS

PAVEMENT REHABILITATION OF VARIOUS ROADS

BID NO. 2024-06

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CITY OF IMPERIAL NOTICE INVITING SEALED BIDS

Pavement Rehabilitation of Various Roads in the City of Imperial

BID NO. 2024-06

PUBLIC NOTICE IS HEREBY GIVEN that the City of Imperial, as CITY, invites sealed bids for the above stated project and will receive such bids in the offices of the City Clerk at 420 S. Imperial Avenue, Imperial, California 92251 up to the hour of <u>3:00 P.M. Thursday, August 15, 2024</u>, at which time they will be publicly opened and read aloud. A bid summary will then be prepared and posted.

A Non-Mandatory Pre-Bid meeting will be conducted at <u>10:00 AM on Tuesday, July 30, 2024</u> at City Hall located at 420 S. Imperial Ave., Imperial, California 92251 to be followed by a Field Walkthrough at the project site.

The work to be done consists of furnishing all materials, equipment, tools, labor and incidentals as required by the contract documents for road rehabilitation improvements along various roads, consisting of the following scope of work: traffic control around the construction zones, grinding existing AC pavement, HMA leveling course, install ARAM, and ARHM overlay. New pavement striping, raising/lowering of utilities, and materials testing will be provided by the CITY.

Asphalt and concrete demolition debris shall be recycled or diverted as required by the City's C&D Ordinance.

Bid packages are available at City Hall, 420 S. Imperial Avenue, Imperial, California 92251 upon payment of a \$85.00 non-refundable fee (\$100.00 if mailed). Only those firms who have purchased the bid documents will be provided any addendums that may be issued for this project prior to the bid opening date.

Any contract entered into pursuant to this notice will incorporate the provisions of the State Labor Code of the State of California. Compliance with the State prevailing rates of wages and apprenticeship employment standards established by the State director of Industrial Relations will be required. Affirmative action to ensure against discrimination in employment practices on the basis of race, color, national origin, ancestry, sex, or religion will also be required.

This project is funded with local funds and does <u>not</u> have a specific contract Disadvantaged Businesses Enterprises (DBE) Contract Goal.

The Contractor's compliance with Executive Order 11246 and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from the solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform through the duration of the contract, and in each trade, and the Contractor shall make a good faith effort to employ women and minority individuals evenly on each of its projects.

The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

Each bid must be accompanied by a guaranty of cash, certified check, cashier's check or bid bond made payable to the City of Imperial for an amount equal to at least ten percent (10%) of the bid. Such guaranty to be forfeited should the bidder to whom the contract is awarded fails to enter the contract. All guaranties to be returned after the contract is awarded.

In conformance with the State of California Public Contract Code Section 22300, the contractor may substitute securities for any funds withheld by the City to ensure performance under the contract.

At request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the City or with a State or Federally chartered bank as the escrow agent who shall pay such funds to the contractor upon notification by the City of contractor's satisfactory completion of contract.

The type of securities deposited and the method of release shall be approved by the City Attorney's office.

As used in this notice, and in the contract resulting from this solicitation, the "covered area" is in the City of Imperial in Imperial County, State of California.

The contract documents call for monthly payments based upon the engineer's estimate of the work completed. The City of Imperial will retain five (5) percent of each progress payment as security for completion of the balance of the work. At the request and expense of the successful bidder, the City will pay the amounts so retained upon compliance with the requirements of Public Contract Code Section 22300 and the provisions of the contract documents pertaining to Substitution of Securities.

Bids must be prepared on the approved proposal forms in conformance with the Instructions to Bidders and submitted in a sealed envelope plainly marked on the outside;

ATTN: CITY CLERK: SEALED BID FOR: PAVEMENT REHABILITATION OF VARIOUS ROAD IN THE CITY OF IMPERIAL BID NO. 2024-06

The Proposal should be delivered in a sealed envelope no later than <u>3:00 P.M. Thursday, August</u> 15, 2024, addressed as follows:

City of Imperial, City Hall – City Clerk 420 S. Imperial Avenue, Imperial, CA 92251

Questions concerning the proposal should be directed to David Dale, PE with the City of Imperial at (760) 355-3336 or via email: <u>ddale@imperial.ca.gov</u>. Questions should be received no later than **3:00pm Wednesday, August 7, 2024.**

Clarification desired by a proposer shall be requested in writing with sufficient time to allow for a response prior to the date RFPs are due. Oral explanation or instructions shall not be considered binding on behalf of the City.

Any modifications to this solicitation will be issued by the City as a written addendum.

The City will not consider proposals received after the specified time and date.

This bid proposal does not commit the City of Imperial to award a contract or pay any costs associated with the preparation of a Proposal.

The City of Imperial reserves the right to reject any or all bids, to award each item separately, delete portions of the work, and/or waive any informality on any bid. No bid may be withdrawn for 60 days after the time set for the opening thereof.

Failure by the successful bidder to enter into a contract with the City or to deliver goods and/or services in accordance with the bid may result in a declaration by the City that the bidder is not a responsible bidder, and elimination from consideration in future bidding.

No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1 (a)]. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Any bid submitted by a contractor or subcontractor not properly licensed and not registered with the Department of Industrial Relations shall be considered non-responsive and will be rejected.

At the time of contract award, the prime contractor shall possess a Class "A" contractor's license and/or any combination of "C" specialty contractor's license(s) sufficient to perform the work.

Dated this _____ day of _____, 2024.

By: ______ Kristina Shields – City Clerk

City of Imperial 420 S. Imperial Avenue Imperial, CA 92251 (760) 355-4373

CITY OF IMPERIAL

INSTRUCTIONS TO BIDDERS

Pavement Rehabilitation of Various Roads in the City of Imperial

BID NO. 2024-06

PROPOSAL FORMS

Bids shall be submitted in writing on the Bid Proposal forms provided by the CITY. All information requested therein must be clearly and legibly set forth in the manner and form indicated. The CITY will not consider any bid proposal not meeting these requirements and/or not submitting all forms requested herein.

PROPOSAL GUARANTEE (BID BOND)

Proposals must be accompanied by a proposal guarantee consisting of a certified check or bid bond payable to the CITY in the amount of (10%) of the total amount Bid. Any proposal not accompanied by such a guarantee will not be considered. If a bidder to whom a contract is awarded fails or refuses to execute the contract documents or furnish the required insurance policies and bonds as set forth in those documents, the proposal guarantee shall be forfeited to the CITY. The proposal guarantees of all bidders will be held until the successful bidder has properly executed all contract documents.

NON-COLLUSION AFFIDAVIT

Bidder shall declare that the only persons or parties interested in the proposal as principals are those named therein; that no officer, agent, or employee of the CITY is personally interested, directly or indirectly, in the proposal; that the proposal is made without connection to any other individual, firm, or corporation making a bid for the same work; and that the proposal is in all respects fair and without collusion or fraud. The Non-Collusion Affidavit shall be executed and submitted with the proposal.

PROPOSAL BID SHEET

Bidders shall give unit prices for each and all of the items set forth. No aggregate bids will be considered. The bidder shall set forth for each item of work, in clearly legible figures, a unit item price and a total for the item in the respective spaces provided for this purpose. The quantities listed in the Bid sheets are supplied to give an indication of the general scope of work, but the accuracy of figures is not guaranteed and the bidder shall make his own estimates from the drawings. In case of a variation between the unit price and the totals shown by the bidder, the unit price will be considered to be the bid.

No bidder may withdraw his proposal for a period of sixty (60) days after the time set for opening thereof. However, the CITY will return all proposal guarantees within ten (10) days after the award of the contract or rejection of the bids, as the case may be, to the respective bidders whose proposals they accompany.

DELIVERY OF PROPOSAL

Proposals may be mailed or delivered by messenger. However, it is the bidder's responsibility alone to ensure delivery of the proposal to the hands of the CITY's designated official prior to the bid opening hour stipulated in the "Notice Inviting Sealed Bids." Late proposals will not be considered. Proposals shall be enclosed in a sealed envelope plainly marked on the outside,

ATTN: CITY CLERK: SEALED BID FOR: Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

WITHDRAWAL OF PROPOSALS

A proposal may be withdrawn by a written request signed by the bidder. Such requests must

be delivered to the CITY's designated official prior to the bid opening hour stipulated in the "Notice Inviting Sealed Bids". The withdrawal of a proposal will not prejudice the right of the bidder to submit a new proposal, providing there is time to do so. Proposals may not be withdrawn after said hour without forfeiture of the proposal guarantee.

IRREGULAR PROPOSALS

Unauthorized conditions, limitations, or provisions attached to a proposal will render it irregular and may cause its rejection. The completed proposal forms shall be without interlineations, alterations, or erasures. Alternative proposals will not be considered unless specifically requested. No oral, telegraphic, or telephonic proposal, modification, or withdrawal will be considered.

TAXES

No mention shall be made in the proposal of Sales Tax, Use Tax, or any other tax, as all amounts bid will be deemed and held to include any such taxes, which may be applicable.

DISQUALIFICATION OF BIDDERS

In the event that any bidder acting as a prime contractor has an interest in more than one proposal, all such proposals will be rejected, and the bidder will be disqualified.

This restriction does not apply to subcontractors or suppliers who may submit quotations to more than one bidder, and while doing so, may also submit a formal proposal as a prime contractor.

No contract will be executed unless the bidder is licensed in accordance with the provisions of the State Business and Professions Code.

INTERPRETATION OF PLANS AND DOCUMENTS

If any person contemplates submission of a bid for the proposed contract and is in doubt as to the true meaning of any part of the services to be performed, he may submit to the Engineer of the CITY a written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery.

Any interpretation or correction of the proposed documents shall be made only by addendum duly issued and copy of such addendum will be mailed or delivered to each person receiving a set of such documents.

The Engineer will not be responsible for any other explanation or interpretations of the proposed documents.

ADDENDA OR BULLETINS

All bidders are advised as to the possibility of issuance of addenda affecting the items, scope or quantity of the work required for this project. Each bidder shall be fully responsible for informing himself as to whether or not any such addenda have been issued. The effect of all addenda to the Contract Documents shall be considered in the bid, and said addenda shall be made a part of the contract documents and shall be returned with them. Failure to cover in his bid any such addenda issued may render his bid irregular and may result in its rejection by the CITY.

LEGAL RESPONSIBILITIES

All proposals must be submitted, filed, made, and executed in accordance with State and Federal laws relating to bids for contracts of this nature whether the same are expressly referred to herein or not.

Any Bidder submitting a proposal shall by such action thereby agree to each and all of the terms, conditions, provisions, and requirements set forth, contemplated, and referred to in the Contract Documents, and to full compliance therewith.

AWARD OF CONTRACT

Following a review of the bids, the CITY shall determine whether to award the contract or to reject all bids. The award of contract, if made, will be to the lowest responsible Bidder as determined solely by the CITY. At the time of contract award, the successful Bidder shall hold a Class A Contractors License or a combination of Class C license(s), as required to perform the work, issued by the State of California.

Additionally, the CITY reserves the right to reject any or all proposals, to accept any bid or portion thereof, to waive any irregularity, and to take the bids under advisement for the period of time stated in the "Notice Inviting Sealed Bids", all as may be required to provide for the best interests of the CITY. In no event will an award be made until all necessary investigations are made as to the responsibility and qualifications of the Bidder to whom the award is contemplated.

No bidder may withdraw his proposal for a period of sixty (60) days after the time set for opening thereof. However, the CITY will return all proposal guarantees within ten (10) days after the award of the contract and execution of the contract documents or rejection of the bids, as the case may be, to the respective bidders whose proposals they accompany.

LABOR CODE

Pursuant to the provisions of Section 1773 of the Labor Code of the State of California (herein referred to as Labor Code), the CITY has obtained the general provisions rate of per diem wages and the general prevailing rate for holiday and overtime work in this locality for each craft, classification or type of workman needed to execute the contract from the Director of the Department of Industrial Relations. These rates are on file with the Clerk of the CITY.

Travel and subsistence payments to each workman needed to execute the work shall be made as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with Section 1773.8 of the Labor Code.

The Contractor shall comply with the provisions of Section 1774 of the Labor Code. Failure to comply with the subject section will subject the Contractor to penalty and forfeiture provisions of Section 1775 of the Labor Code.

Pursuant to the provisions of Section 1770 of the Labor Code, the general prevailing rate of wages has been ascertained (which rate includes employer payments for health and welfare, vacation, pension and similar purposes) applicable to the work to be done, for straight time, overtime, Saturday, Sunday and holiday work. The holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of the particular craft, classification or type of workmen concerned.

The CITY will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the CITY basis claim against the on the contract. of The CONTRACTOR and subcontractors shall comply with Section 1777.6 of the Labor Code which stipulates that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age, of such employee, except as provided in Section 3077 of the Labor Code.

WORKMAN'S COMPENSATION CERTIFICATE

Section 3700 of the Labor Code requires that every employer shall secure the payment of compensation by either being insured against liability to pay compensation with one or more insurers or by securing a certificate of consent to self-insure from the State Director of Industrial Relations.

In accordance with this section and with Section 1861 of the Labor Code, the contractor shall sign a Compensation Insurance Certificate, which is included with the Contract Agreement,

and submit same to City along with the other required contract documents, prior to performing any work. Reimbursement for this requirement shall be considered as included in the various items of work.

CLAYTON ACT AND CARTWRIGHT ACT

Section 4551 of the State Government Code specifies that in executing a public works contract with the CITY to supply goods, services or materials, the Contractor or Subcontractor offers and agrees to assign to the CITY all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 commencing with Sec. 16700) of Part 2 of Division 7 of the Business and Professions Code, arising from purchase of goods, services or materials pursuant to the contract or subcontract. This assignment shall become effective when the CITY tenders final payment to the Contractor without further acknowledgment by the parties.

SUBSTITUTION OF SECURITIES

In conformance with the State of California Public Contract Code Section 22300, the contractor may substitute securities for any funds withheld by the CITY to ensure performance under the contract.

At the request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the City or with a State or Federally chartered bank as the escrow agent who shall pay such funds to the contractor upon notification by CITY of Contractor's satisfactory completion of the contract.

The type of securities deposited and the method of release shall be approved by the City Attorney's office.

SUBLETTING AND SUBCONTRACTING

Pursuant to the Subletting and Subcontracting Fair Practices Act (commencing with Section 4100 of the Government Code), bidders are required to list in their proposal the name and location of place of business of each subcontractor who will perform work or labor or render services in or about the construction of the work or improvement or a subcontractor who specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Plans and Specifications in excess of 1/2 of 1% of this prime contractor will do that portion of the work. It is the Agency's intent for the Subletting and Subcontracting Fair Practices Act to apply to all phases of the work.

CITY BUSINESS LICENSE

The Contractor shall obtain a City of Imperial Business License prior to the City's issuing the Notice to Proceed. The annual fee for the Business License is ninety-six dollars (\$96.00).

CITY OF IMPERIAL BID PROPOSAL For

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

TO CITY OF IMPERIAL, as CITY:

In accordance with CITY's "Notice Inviting Sealed Bids", the undersigned BIDDER hereby proposes to furnish all materials, equipment, tools, labor, and incidentals required for the above stated project as set forth in the Contract Documents, and to perform all work in the manner and time prescribed.

BIDDER declares that this proposal is based upon careful examination of the work site, Plans, Specifications, Instructions to Bidders, and Contract Documents. If this proposal is accepted for award, BIDDER agrees to enter into a contract with the CITY at the unit and/or lump sum prices set forth in the following Proposal Bid Sheet. BIDDER understands that failure to enter into a contract in the manner and time prescribed will result in forfeiture to the CITY of the Bid Bond accompanying this proposal.

BIDDER understands that a bid is required for the entire work that the estimated quantities set forth in the Proposal Bid Sheet are solely for the purpose of comparing bids, and that final compensation under the contract will be based upon the actual quantities of work satisfactorily completed. It is agreed that the unit and/or lump sum prices bid include all appurtenant expenses, taxes, royalties, and fees. In the case of discrepancies in the amounts bid, unit prices shall govern over extended amounts.

BIDDER agrees and acknowledges that he is aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for workman's compensation or to undertake self-insurance in accordance with the provisions of that code, and that the BIDDER will comply with such provisions of that code before commencing the performance of this Contract if awarded it.

BIDDER certifies that in all previous contracts or subcontracts, all reports which may have been due under the requirements of any agency, State, or Federal equal employment opportunity orders have been satisfactorily filed, and that no such reports are currently outstanding.

BIDDER declares that the only persons or parties interested in this proposal as principals are those named herein; that no officer, agent, or employee of the CITY is personally interested, directly or indirectly, in this proposal; that this proposal is made without connection to any other individual, firm, or corporation making a bid for the same work; and that this proposal is in all respects fair and without collusion or fraud.

BIDDER certifies that affirmative action has been taken to seek out and consider disadvantaged business enterprises for those portions of the work to be subcontracted, and that such affirmative actions have been carefully documented, that said documentation is open to inspection, and that said affirmative action will remain in effect for the life of any contract awarded hereunder. Furthermore, BIDDER certifies that affirmative action will be taken to meet all equal employment opportunity requirements of the contract documents.

CITY OF IMPERIAL BID PROPOSAL For

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

• •

DATED:	, 2015	BIDDER:
BIDDER'S ADDRESS:	BY	Y: TITLE:
TELEPHONE #:		
FAX #:		

BIDDER'S INFORMATION

BIDDER certifies that the following information is true and correct:

Bidder's Name

Business Address

Telephone_____

State Contractor's License No. and Class_____

Original Date Issued ______ Expiration Date_____

The following are the names, titles, addresses, and phone numbers of all individuals, firm members, partners, joint ventures, and/or corporate officers having a principal interest in this proposal:

The dates of any voluntary or involuntary bankruptcy judgments against any principal having an interest in this proposal are as follows:

All current and prior DBA's, alias, and/or fictitious business names for any principal having an interest in this proposal are as follows:

CONTRACTOR'S LICENSING STATEMENT

The undersigned is licensed in accordance with the laws of the State of California providing for the registration of Contractors.

Contractor's License Number:	
Name of Individual Contractor (Print or type):	
Signature of Owner:	
Business Address:	
Or	
Name of Firm:	
Business Address:	
Name:	Title:
Address:	
Or	
Name of Corporation:	
Corporation Address:	
Corporation organized under the laws of the State of_	

Signature of President of Corporation

Signature of Secretary of Corporation

LIST OF SUBCONTRACTORS

BIDDER proposes to subcontract certain portions of the work, and to procure materials and equipment from suppliers and vendors as follows:

Name Under Which	Specifi	-	Addres			
Subcontractor	License	e of	Office	of To	tal	Description
Is Licensed	No.	Mill/Sh	op	Contract	of Subo	contract
			-			

 	······································

REFERENCES

The following are the names, addresses, and phone numbers for three public agencies for which BIDDER has performed similar work within the past two years:

DESIGNATION OF SURETIES

The following are the names, addresses, and phone numbers for all brokers and sureties from whom BIDDER intends to procure insurance and bonds:

CITY OF IMPERIAL

BID BOND

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

KNOW ALL MEN BY THESE PRESENTS that ______, as BIDDER, and ______, as SURETY, are held and firmly bound unto the CITY OF IMPERIAL, as CITY, in the penal sum of dollars(\$_______), which is ten percent (10%) of the total amount bid by BIDDER to the

CITY for the above stated project, for the payment of which sum, BIDDER and SURETY agree to be bound, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, whereas BIDDER is about to submit a bid to CITY for the above stated project, if said bid is rejected, or if said bid is accepted and a contract is awarded and entered into by BIDDER in the manner and time specified, then this obligation shall be null and void, otherwise it shall remain in full force and effect in favor of AGENCY.

WITNESS our hands this ____ day of _____, 2024.

(seal)

CONTRACTOR (CORPORATION) – TYPE

President

Ву_____

Secretary/Treasurer

NOTE: SIGNATURE OF CORPORATE OFFICIALS MUST BE NOTARIZED.

Subscribed and sworn to before me this _____ day of _____, 2024.

Notary Public_____

(Page 1 of 2)

SURETY'S NAME-TYPE

Mailing Address_____

By:_____

Name

Title_____

NOTE: SIGNATURE OF SURETY MUST BE NOTARIZED.

Subscribed and sworn to before me this _____ day of _____, 2024.

Notary Public _____

(seal)

(Page 2 of 2)

NON-COLLUSION AFFIDAVIT

)) SS

STATE OF CALIFORNIA

COUNTY OF_____

	being first duly sworn
deposes and says that he is	(sole owner, a partner, president,
etc.) of	the party making the
foregoing bid; that such bid is not made in the interest of or be	
partnership, company, association, organization or corporation,	
collusive or a sham, that said bidder has not directly or indirectly	
bidder to put in a sham bid, or that anyone shall refrain from bid	
any manner, directly or indirectly sought by agreements, com	munication or conference with
anyone to fix the bid price of said bidder or of any other bidder,	
cost element of such bid price, or of that of any other bidder, or to	
public body awarding the contract or anyone interested in the prop	
contained in such bid are true, and further, that said bidder has not	
his bid price, or any breakdown thereof, or the contents thereof,	
relative thereto, or paid and will not pay any fee in connection, or	
any member or persons as have a partnership or other financial	interest with said bidder in his
general business.	

Signed:_____

Title:_____

Subscribed and sworn to before me this _____ day of _____,2024.

Notary Public_____

CITY OF IMPERIAL

PAVEMENT REHABILITATION OF VARIOUS ROADS IN THE CITY OF IMPERIAL Bid No. 2024-06

DESIGNATION/CERTIFICATION OF ASPHALT-RUBBER AND AGGREGATE MEMBRANE CONTRACTOR AND/OR SUBCONTRACTOR(S).

THIS FORM MUST BE INCLUDED AND FULLY COMPLETED WITH THE BID OR THE BID SHALL BE CONSIDERED NON-RESPONSIVE

Bidder proposes to have the ARAM installed by:

(Insert name of Contractor/Sub-Contractor above)

This section shall be completed even if the apparent low bidder plans to produce and install ARAM with its own forces. Name of contractor and/or subcontractor(s) shall be the actual company(ies) applying the binder and aggregate.

For any bid to be considered responsive, performance criteria must be demonstrated on five separate projects performed by the same contractor or subcontractor(s) designated above, and with equivalent aggregate and binder proposed for the ARAM in this bid. A contractor and /or subcontractor(s) will be considered the same if a name change occurs or the contractor and/or subcontractor(s) is a successor-in-interest to the entity identified as performing the work. If contractor or subcontractor(s) cannot demonstrate five separate projects, the City will accept an experience list of its employees and the projects they have completed with equivalent aggregate and binder proposed for the ARAM in this bid. If the City is not able to verify the employee experience list, the bid shall be considered non-responsive. Two years shall have elapsed since completion of the ARAM surface on each project, and the projects shall be located in Southern California in areas or regions which have documented National Weather Service maximum air temperatures of above 105°F during June, July, August and September for a minimum of 40 days on a three-year average annual basis.

To be considered a valid representative project, bidder must submit the name of the project, owner agency, agency representative's name and phone number, and a list of streets with limits totaling at least 1 mile (based on full width) in length for each project and the date the project was actually performed. A project will be considered a valid representative project if asphalt emulsion spray application was originally placed with or without an application of sand, within 15 calendar days of the application of ARAM. Any other cover coat or course on the ARAM will cause the ARAM to be considered invalid as a representative project. ARAM on all projects must show insignificant raveling (loss of rock) and insignificant flushing (binder migration to the surface) at the time of inspection by the Agency. Bidder shall verify any proposed representative projects prior to listing a subcontractor(s) with such projects, or the bid will be considered non-responsive. If the Bidder cannot list in the space provided five projects that meet the criteria specified herein that were performed by the proposed ARAM contractor or subcontractor(s), the bid shall be considered non-responsive.

REPRESENTATIVE ARAM PROJECTS

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THIS FORM MUST BE INCLUDED AND FULLY COMPLETED WITH THE BID OR

THE BID SHALL BE CONSIDERED NON-RESPONSIVE

Name of Project No. 1	Date Completed
	Agency Contact
	Approx. Length of ARAM (Full Width)
Name of Project No. 2	Date Completed
Agency	Agency Contact
Phone	Approx. Length of ARAM (Full Width)
Name of Project No. 3	Date Completed
Agency	Agency Contact
Phone	Approx. Length of ARAM (Full Width)
Name of Project No. 4	Date Completed
Agency	Agency Contact
	Approx. Length of ARAM (Full Width)
Name of Project No. 5	Date Completed
Agency	Agency Contact
Phone	Approx. Length of ARAM (Full Width)

CITY OF IMPERIAL

PROPOSAL BID SHEET 1/2 FOR Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

Item No.	Bid Item Description	Units	Estimated Quantity	Unit Price (*)	Amount
1.	Mobilization	LS	1	\$	\$
2.	Traffic Control & Construction Area Signs	LS	1	\$	\$
3.	Cold Plane AC 1-inch – intersection Joint System II and Cul-de-Sac Bulb Pavement Section Details	SF	16,577	\$	\$
4.	3/4" Leveling Course:½" Hot Mix Asphalt Type A and SS1h Tack Coat	TON	4,400	\$	\$
5.	3/8" Asphalt Rubber Aggregate Membrane (ARAM)	SY	109,111	\$	\$
6.	1.5" Asphalt Rubber Hot Mix (ARHM) Overlay: 1/2" Aggregate / Type Gap Graded (GG)	TON	900	\$	\$
7.	Type II Slurry Seal	SY	100,536	\$	\$
8.	Intersection Stop Points (1-1/2 Inch Big Rock) and 15 th Street between Hwy 86 and Imp. Ave.	SF	6,457	\$	\$
9.	Lower/Raise/Adjust Existing Utilities by City of Imperial (BY CITY FORCES, TO BE COMPLETE PRIOR TO CONSTRUCTION)	LS	1	\$ 0.00	\$ 0.00
10.	Temporary Raised Pavement Markers (PERMANENT STRIPING BY CITY FORCES)	LS	1	\$	\$
11.	Dig Out (4-inch thick ARHM over 18" Class II Base Compacted to 95% Max. Density)	SF	400	\$	\$
		TOT	TAL BID PR	ROPOSAL	\$
(*) The unit price shall include the cost of all items necessary to comp	olete each b	bid item		1
		<u>-</u>			

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CITY OF IMPERIAL PROPOSAL BID SHEET 2/2 FOR

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

<u>NOTE 1</u>: THE ESTIMATED QUANTITIES INDICATED ABOVE ARE APPROXIMATE. THE ENGINEER WILL NOT ASSUME RESPONSIBILITY FOR THE QUANTITIES ILLUSTRATED IN THE PROJECT PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE QUANTITIES.

NOTE 2: THE LOWEST RESPONSIVE BID WILL BE BASED ON THE LOWEST TOTAL BID PROPOSAL.

TOTAL AMOUNT OF BID PROPOSAL (NUMBERS)

TOTAL AMOUNT OF BID PROPOSAL (WORDS)_____

Note: The estimated quantities listed in the Proposal Bid Sheet(s) are supplied to give an indication of the general scope of the work, but the accuracy of these figures is not guaranteed and the bidder shall make his own estimates from the drawings. In case of a variation between the unit price and the totals shown by the bidder, the unit price will be considered to be the bid.

Bidder's Name and Telephone Number

BID PROPOSAL

IN WITNESS WHEREOF, BIDDER execute titles, hands, and seals of all forenamed princ , 2024.		
Bidder:_		
Ву:	-	
Title:	-	
Subscribed and sworn to this	_day of	, 2024.
NOTARY PUBLIC		

AGENCY acknowledges this proposal was received and opened at the time and in the place specified, and that it was accompanied by the required guarantee in the amount of ten percent (10%) of the total bid.

Ву:_____

Title:______

CITY OF IMPERIAL CONTRACT AGREEMENT

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

THIS CONTRACT AGREEMENT is made and entered into for the above stated project this ______day of _______, 2024, BY AND BETWEEN THE CITY OF Imperial, as the CITY, and ______, as CONTRACTOR.

WITNESSETH that the CITY and CONTRACTOR have mutually agreed as follows:

<u>ARTICLE I</u>

The contract documents for the aforesaid project shall consist of the Notice Inviting Sealed Bids, Instructions to Bidders, Proposal, General Specifications, Standard Specifications, Special Provisions, Plans, and all referenced specifications and appendices; together with this Contract Agreement and all required bonds, insurance certificates, permits, notices, and affidavits; and also including any and all addenda or supplemental agreements clarifying, amending, or extending the work contemplated as may be required to insure its completion in an acceptable manner. All of the provisions of said contract documents are made a part hereof as though fully set forth herein.

<u>ARTICLE II</u>

For and in consideration of the payments and agreements to be made and performed by the CITY, the CONTRACTOR agrees to furnish all materials and perform all work required for the above stated project, and to fulfill all other obligations as set forth in the aforesaid contract documents. ARTICLE III

CONTRACTOR agrees to receive and accept the unit labor, equipment rental and material prices set forth in the Proposal as the basis for compensation for furnishing all materials, performing all work, and fulfilling all obligations hereunder. Said compensation shall cover all expenses, losses, damages, and consequences arising out of the nature of work during its progress or prior to its acceptance including those for well and faithfully completing the work and the whole thereof in the manner and time specified in the aforesaid contract documents; and also including those arising from actions of the elements, unforeseen difficulties or obstructions encountered in the prosecution of the work, suspension or discontinuance of the work, and all other unknowns or risks of any description connected with the work.

ARTICLE IV

The CITY hereby promises and agrees to employ, and does hereby employ, CONTRACTOR to provide the materials, do the work, and fulfill the obligations according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth in the contract documents.

<u>ARTICLE V</u>

CONTRACTOR acknowledges the provisions of the State Labor Code requiring 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 certifies compliance with such provisions.

<u>ARTICLE VI</u>

CONTRACTOR agrees to indemnify and hold harmless the CITY and all of its officers and agents from any claims, demands, or causes of action, including related expenses, attorney's fees, and costs, based on, arising out of, or in any way related to the work undertaken by CONTRACTOR hereunder.

ARTICLE VII

CONTRACTOR affirms that the signatures, titles, and seals set forth hereinafter in execution of this Contract Agreement represent all individuals, firm members, partners, joint ventures, and/or corporate officers having a principal interest herein.

IN WITNESS WHEREOF the parties hereto have caused this Contract Agreement to be executed the day and year first written.

CITY:		CONTRACTOR:
MAYOR – CIT	Y OF IMPERIAL	(CORPORATION NAME – TYPE)
ATTEST:		BY:
		TITLE:
		ВҮ:
		TITLE:
KRISTINA SH CITY CLERK	IELDS - CITY OF IMPERIAL	
NOTE:	SIGNATURES OF CC NOTARIZED.	DRPORATE OFFICIALS AND SURETY MUST BE
Subscribed bef	ore me on this day o	f 2024

Subscribed before me on this _____ day of _____, 2024.

,

Notary Public	
My commission expires:	

(SEAL)

CONTRACT PERFORMANCE BOND (CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the CITY OF IMPERIAL (sometimes referred to hereinafter as "Obligee") has awarded to ________(hereinafter designated as the "Contractor"), an agreement for the work described as follows:

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

(hereinafter referred to as the "Public Work"); and

WHEREAS, the work to be performed by the Contractor is more particularly set forth in that certain contract for the said Public Work dated______,(hereinafter referred to as the "Contract"), which Contract is incorporated herein by this reference; and

WHEREAS, the Contractor is required by said Contract to perform the terms thereof and to provide a bond both for the performance and guaranty thereof.

NOW, THEREFORE, we,	the
undersigned Contractor, as Principal, and,	uic

a corporation organized and existing under the laws of the State of ______, andduly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the City of Imperial in the sum of ______

Dollars (\$_____), said sum being not less than one hundred percent (100%) of the total amount payable by the said Obligee under the terms of the said Contract, for which amount will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the bounden Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and will and truly keep and perform the covenants, conditions and agreements in the said Contract and any alteration thereof made as therein provided, on his or its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill the one year guarantee of all materials and workmanship; and indemnify and save harmless the Obligee, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

No final settlement between the Obligee and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

Contractor and Surety agree that if the Obligee is required to engage the services of an attorney in connection with enforcement of the bond, each shall pay Obligee's reasonable attorney's fees incurred, with or without suit, in addition to the above sum.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this ______ day of ______, 2024.

PRINCIPAL/CONTRACTOR:

By:_____

SURETY:

By:_____Attorney-in-Fact

The rate of premium on this bond is _____ per thousand.

The total amount of premium charged: \$_____

(The above must be filled in by corporate surety).

IMPORTANT: Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in Section 105 of the California Insurance Code, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, it must also appear on the Treasury Department's most current list (Circular 570 as amended). THIS IS A REQUIRED FORM.

Any claims under this bond may be addressed to:

(Name and Address of Surety)

1

(Name and Address of agent or representative for service of process in California if different from above)

(Telephone Number of Surety and agent or representative for service of process in California).

STATE OF CALIFORNIA) ss. COUNTY OF _____

On this _____ day of ______, in the year 2024, before me, ______, a Notary Public in and for said known to , knownto me to be the person whose name is subscribed to the within instrument as the Attorney-in-Fact of the

Attorney-in-Fact.

(Surety) thereto and his own name as

Notary Public in and for said State

(SEAL)

My Commission expires:

NOTE: A copy of the power of attorney to local representatives of the bonding company must be attached hereto.

PAYMENT BOND (CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the City of Imperial (sometimes referred to hereinafter as "Obligee") has awarded to(hereinafter designated as the "Contractor"), an agreement dated ______, described as follows:

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

(hereinafter referred to as the "Contract"): and

WHEREAS, said Contractor is required to furnish a bond in connection with said Contract, and pursuant to Section 3247 of the California Civil Code;

NOW, THEREFORE, We,

the undersigned Contractor, as Principal; and ______, a corporation organized and existing under the laws of the State of ______, andduly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the City of Imperial and to any and all persons, companies or corporations entitled to file stop notices under Section 3181 of the California Civil Code, in the sum of

Dollars (\$_____), said sum being not less than one hundred percent (100%) of the total amount payable by the said Obligee under the terms of the said Contract, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that, if said Contractor, his or its heirs, executors, administrators, successors or assigns, or Sub-contractors, shall fail to pay for any materials, provisions or other supplies, implements, machinery or power used in, upon for or about the performance of the Public Work contracted to be done, or to pay any person for any work or labor of any kind, or for bestowing skills or other necessary services thereon, or for amounts due under the Unemployment Insurance Code with respect to such work or labor, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of paid Contractor and his Subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work and labor as required by the provisions of Section 3247 through 3252 of the Civil Code, the Surety or Sureties hereon will pay for same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In addition to the provisions hereinabove, it is agreed that this bond will inure to the benefit of any and all persons, companies and corporations entitled to serve stop notices under Section 3181 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or additions to the terms of the said Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

No final settlement between the Obligee and the Contractor hereunder shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

Contractor and Surety agree that if the Obligee is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay Obligee's reasonable attorney's fees incurred, with or without suit, in addition to the above sum.

IN WITNESS WHEREOF, we have hereunto set our hands and seal this _____day of ______, 2024.

PRINCIPAL/CONTRACTOR:

By:_____

SURETY:_____

By:_____Attorney-in-Fact

<u>IMPORTANT</u>: Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in Section 105 of the California Insurance Code, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, it must also appear on the Treasury Department's most current list (Circular 570 as amended). <u>THIS IS A REQUIRED FORM</u>.

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of agent or representative for service of process in California if different from above)

(Telephone Number of Surety and agent or representative for service of process in California).

STATE OF CALIFORNIA)) ss.

COUNTY OF ______)

On this _____, in the year 2024, before me, _____, a Notary Public in and for

said State personally appeared______, known to me to be the person whose name is subscribed to the within instrument as the Attorney-in-Fact of the_______(Surety) and acknowledged to me that he subscribed the name of the ______(Surety) thereto and his own name as Attorney-in-Fact.

Notary Public in and for said State

(SEAL)

My Commission expires:_____

Note: A copy of the power of attorney to local representatives of the bonding company must be attached hereto.

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GENERAL LIABILITY ENDORSEMENT

CITY OF IMPERIAL 420 S. Imperial Ave. Imperial, CA 92251

A. 1.	POLICY INFORMATION Endorsement # Insurance Company:
	Policy Number:
2.	Policy Term: (From)(To)
	Endorsement Effective Date:
3.	Named Insured:
4.	Address of Named Insured:
5.	Limit of Liability Any One Occurrence/Aggregate:
6.	Deductible or Self-Insured Retention (Nil unless otherwise specified): \$
7. C	Coverage is equivalent to:
	*Comprehensive General Liability form GL0002
	Commercial General Liability "Occurrence" form CG0001
8. I	Bodily Injury and Property Damage Coverage is: "occurrence"
mad geno	e: The City of Imperial standard insurance requirements specify "occurrence" coverage. "Claims- le" coverage is not acceptable. If commercial general liability form or equivalent is used, the eral aggregate must apply separately to this location/project or the general aggregate must be the occurrence limit.
9. E	Description of Project:

B. POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

- <u>INSURED</u>. As respects any work performed on the above-described Project, the City of Imperial, its elected or appointed officers, officials, employees, consulting engineers, and volunteers are included as insured with regard to damages and defense of claims arising from: (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, or (c) premises owned, leased or used by the Named Insured.
- 2. <u>CONTRIBUTION NOT REQUIRED</u>. As respects: (a) work performed by the Named Insured on the above-described Project for or on behalf of the City of Imperial; or (b) products sold by the Named Insured to the City of Imperial for use on the Project; or (c) premises leased by the Named Insured from the City of Imperial, the insurance afforded by this policy shall be primary insurance as respects the City of Imperial, its elected or appointed officers, officials, employees, consulting engineers, or volunteers; or stand in an unbroken chain of coverage excess of the Named Insured schedule underlying primary coverage. In either event, any other insurance maintained by the City of Imperial, its elected or appointed officers, officials, employees, consulting engineers, or volunteers shall be in excess of this insurance and shall not contribute with it.
- 3. <u>SCOPE OF COVERAGE</u>. This policy, if primary, affords coverage at least as broad as:
 - (1) Insurance Services Office form number GL 0002 (Ed. 1/73), Comprehensive General Liability Insurance and Insurance Services Office form number GL 0404 Broad Form Comprehensive General Liability endorsement; or
 - (2) Insurance Services Office Commercial General Liability Coverage, "occurrence" form CG 0001; or
 - (3) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding sections (1) and (2).
- 4. <u>SEVERABILITY OF INTEREST</u>. The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respect to the Company's limit of liability.
- <u>PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR</u> <u>LOSS</u>. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City Imperial, its elected or appointed officer, officials, employees, consulting engineers or volunteers.
- 6. <u>CANCELLATION NOTICE</u>. The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail return receipt requested has been given to the City of Imperial. Such notice shall be addressed as shown in the heading of this endorsement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

Incidents and claims are to be reported to the insurer at:

ATTN							
	(Title)	(Department)					
	(Company)						
	(Street Address)						
	(City)	(State)		<u> </u>	(Z	ip Code)	
	(Telephone Number)						
D.	<u>SIGNATURE OF I</u> OF THE INSURER	NSURER OR AUTH	IORIZED	REPRES	<u>ENTATIV</u>	<u>E</u>	
I,	(print/type name) signature here	con do so bind this co	, warrant listed ompany.	that I have nsurance	authority to company	bind the and by	my
SIGNA	TURE OF AUTHO ment furnished to the	RIZED REPRESEN City of Imperial)	TATIVE	(Original	Signature	required	on
ORGAN	VIZATION:				<u>.</u>		
TITLE:							
	SS:						

TELEPHONE:_____

AUTOMOBILE LIABILITY ENDORSEMENT

CITY OF IMPERIAL 420 S. Imperial Ave. Imperial, CA 92251

6. Deductible or Self-Insured Retention (Nil unless otherwise specified):

B. <u>POLICY AMENDMENTS</u>

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

- 1. <u>INSURED</u>. The City of Imperial, its elected or appointed officers, officials, consulting engineers, employees and volunteers are included as insured with regard to damages and defense of claims arising from: the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the City of Imperial, its elected or appointed officers, officials, employees, consulting engineers or volunteers.
- 2. <u>CONTRIBUTION NOT REQUIRED</u>. As respects work performed by the Named Insured for or on behalf of the City of Imperial, the insurance afforded by this policy shall:
 - (a) be primary insurance as respects the City of Imperial, its elected or appointed

officers, officials, employees, consulting engineers or volunteers;

or

- (b) stand in an unbroken chain of coverage in excess of the Named Insured's primary coverage. In either event, any other insurance maintained by the City of Imperial, its elected or appointed officers, officials, employees or volunteers shall be in excess of this insurance and shall not contribute with it.
- 3. <u>SCOPE OF COVERAGE</u>. This policy, if primary, affords coverage to the Named Insured at least as broad as:
 - (1) Insurance Services Office form number CA 00001 (Ed. 1/78), Code 1 ("any auto") and endorsement CA 0025.
 - (2) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding section (1).
- 4. <u>SEVERABILITY OF INTEREST</u>. The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respect to the Company's limit of liability.
- 5. <u>PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR</u> LOSS. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City of Imperial, its elected or appointed officer, officials, employees, consulting engineers or volunteers.
- 6. <u>CANCELLATION NOTICE</u>. The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail return receipt requested has been given to the City of Imperial. Such notice shall be addressed as shown in the heading of this endorsement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

(Zip Code)
(

Incidents and claims are to be reported to the insurer at:

D. <u>SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE</u> OF THE INSURER

I, _____, warrant that I have authority to bind the (print/type name) listed Insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (Original Signature required on endorsement furnished to the City of Imperial)

ORGANIZATION:

TITLE:______

.

ADDRESS:

TELEPHONE:______

WORKER'S COMPENSATION/EMPLOYERS LIABILITY ENDORSEMENT

CITY OF IMPERIAL 420 S. Imperial Ave. Imperial, CA 92251

A.	POLICY INFORMATION	Endorsement #
1.	Insurance Company:	
2.		
3.	Named Insured:	
4.	Employer's Liability Limit (Coverage B	

B. <u>POLICY AMENDMENTS</u>

In consideration of the policy premium and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

- 1. <u>CANCELATION NOTICE</u>. The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail return receipt requested has been given to the City of Imperial. Such notice shall be addressed as shown in the heading of this endorsement.
- 2. <u>WAIVER OF SUBGROGATION</u>. The Insurance Company agrees to waive all rights of subrogation against the City of Imperial, its elected or appointed officers, officials, agents and employees for losses paid under the terms of this policy which arise from work performed by the Named Insured for the City of Imperial.

C. <u>SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE</u> OF THE INSURER

I, _____, warrant that I have authority to bind the (print/type name) listed Insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (Original Signature required on endorsement furnished to the City of Imperial)

ORGANIZATION			
0	 		

TITLE:_____

ADDRESS:_____

TELEPHONE:_____

CITY OF IMPERIAL GENERAL SPECIFICATIONS

FOR

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. 2024-06

SCOPE OF WORK

The work to be done consists of furnishing all materials, equipment, tools, labor and incidentals as required by the contract documents to construct the above stated project.

The work consists generally of: grinding existing AC pavement, placing HMA leveling course, install ARAM, and ARHM overlay.

The scope of work includes, prior to the start of construction, the coordination between the City of Imperial and the Contractor. Testing and Studies shall be paid by City.

Asphalt and concrete demolition debris shall be recycled or diverted as required by the City's C&D Ordinance.

LOCATION OF WORK

1. Various streets inside the City of Imperial city limits.

<u>TIME OF COMPLETION</u>

The Contractor shall complete all work in every detail within Ninety (90) working days after the date of the Notice to Proceed, exclusive of maintenance periods.

<u>TRAFFIC REQUIREMENTS</u>

All streets must remain open to public traffic. Temporary street closures may be made with the prior approval of the City Engineer.

<u>UTILITY REQUIREMENTS</u>

The Contractor is advised of the existence of the utility notification service provided by UNDERGROUND SERVICE ALERT (USA). USA member utilities will provide the Contractor with an approximate locations of their substructures in the construction area when the Contractor gives at least 48 hours notice to the Underground Service Alert by calling 1-800-422-4133. Contractor shall contact USA as specified and shall provide the City with proof of contact with USA upon request.

Prior to begin of construction, the Contractor shall "pot hole" and/or excavate to determine the depth of existing underground utilities. Any "pot hole" and/or excavation shall be performed in presence of the utility company representative. Contractor shall notify the following agencies at least 48 hours in advance of excavating around any of their utilities or structures.

- 1. Imperial Irrigation District Power: Maricruz Salcedo (760) 339-9493
- 2. Imperial Irrigation District Water: Olivia Alcaraz (760) 339-9108
- 2. Southern California Gas: J.Montenegro, (760) 352-6100 / E.Cuevas (760) 370-5812
- 3. SBC Telephone Company: Mike Ormand, (760) 337-3358
- 4. Time Warner (Cable TV): Keith Johnson, (760) 352-8835
- 5. Imperial County Public Works Department: John Gay, Deputy Director, (760) 482-4462
- 6. City of Imperial Water Department: Robert Emmitt, (760) 355-2155
- 7. City of Imperial Wastewater Department: Chris Kemp, (760) 355-2718
- 8. City of Imperial Public Works Department: David Dale, (760) 355-1152

The Contractor shall exercise extreme care to protect all existing utilities in place whether shown on the plans or not, and shall assume full responsibility for all damage resulting from his operations.

The Contractor shall coordinate with each utility company as to the requirements and methods for protection of their facilities during the construction period, and shall be responsible for preparation and processing of any required plans or permits. The Contractor shall assume full responsibility to maintain uninterrupted service for all utilities, including temporary service connections. Payment for protection in place shall be deemed as included in the items of work as shown on the proposal bid sheet and no additional compensation will be allowed.

FLOW AND ACCEPTANCE OF WATER

It is anticipated that storm, surface or other waters may be encountered at various times and locations during the work herein contemplated. The Contractor, by submitting a bid, acknowledges that he has investigated the risk arising from such waters and has prepared his bid accordingly, and Contractor, by submitting a bid, assumes all of said risk.

The Contractor shall conduct his operations in such a manner that storm or other waters may proceed uninterrupted along their existing street or drainage courses. Diversion of water for short reaches to protect construction in progress will be permitted if public and/or private properties, in the opinion of the Engineer, are not subject to the probability of damage. The Contractor shall obtain written permission from the applicable public agency or property owner before any diversion of water outside of street right of way will be permitted.

REMOVAL OF WATER

The Contractor shall provide and maintain at all times during construction ample means and devices to promptly remove and properly dispose of all water entering the excavations or other parts of the work. Dewatering for the pipelines shall commence when ground water is first encountered, and shall be continuous until such time as the excavated area or trenches are properly backfilled. Dewatering shall be accomplished by well points or some other method which will insure a preservation of final lines and grade of the bottoms of excavation, all subject to the approval of the Engineer.

Disposal of water from dewatering operations shall be the sole responsibility of the Contractor. Disposal methods shall conform to the Porter-Cologne Water Quality Control Act, 1974, the Federal Water Pollution Control Act Amendments of 1972, and the California Administrative Code, Title 23, Chapter 3.

Full compensation of dewatering shall be considered as included in the contract prices paid for the related items of work, and no additional compensation will be allowed therefore.

TRENCH EXCAVATION AND SHORING

For any contract for public works for excavation of any trench or trenches five (5) feet of more in depth, the Agency shall require submission by the Contractor and acceptance by the awarding body or by a Registered Civil or Structural Engineer to whom authority to accept has been delegated, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. This plan shall be prepared by a Registered Civil or Structural Engineer.

Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the safety standards set forth by the State of California Safety Requirements. Nothing in this Section shall be construed to impose tort liability on the awarding body or any of its employees.

STANDARD SPECIFICATIONS

The Standard Specifications of the Agency are contained in the latest edition of the <u>STANDARD</u> <u>SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION</u>, as written and promulgated by the Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and the Southern California District of the Associated General Contractors of California (The Greenbook).

Copies of these Standard Specifications are available from the publisher: Building News, Incorporated P.O. Box 3031 Terminal Annex Los Angeles, California 90051 (213) 202-7775

The Standard Specifications set forth above will control the general provisions for this contract except as amended by the Plans, Special Provisions, or other contract documents. The section numbers of the following Special Provisions coincide with those of the said Standard Specifications. Only those sections requiring amendment or elaboration, or specifying options, are called out.

In case of conflict between the Standard Specifications and the Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

References in the Special Provisions to "CALTRANS Standard Specifications" shall mean the latest edition of the Standard Specifications of the State of California, Department of Transportation. Copies of these specifications and standard drawings may be obtained from:

State of California Department of Transportation Central Publication Distribution Unit 6002 Folsom Boulevard Sacramento, California 95819

References in the Special Provisions to Standard Plans shall mean the Standard Plans of the City of Imperial or other governing agency as specified.

Where the Plans or Specifications describe portions of the work in general terms, but not in complete detail, it is understood that the item is to be furnished and installed complete and in place and that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used. Unless otherwise specified, the Contractor shall furnish all labor, materials, tools, equipment and incidentals, and do all the work involved in executing the contract.

WAGE RATES AND LABOR CODE REQUIREMENTS

<u>Wage Rates</u>

The Contractor and all Subcontractors shall be required to adhere to State general prevailing rate of per diem wages as determined and published by the State Director of the Department of Industrial Relations, pursuant to Sections 1770, 1773, and 1773.2 of the California Labor Code. Copies of these rates and the latest revisions thereto are on file in the Office of the Clerk of the Agency and are available for review upon request.

Attention is directed to the provisions of Sections 1774, 1775, 1776, 1777.5, and 1777.6 of the State Labor Code. Sections 1774 and 1775 require the Contractor and all subcontractors to pay not less

than the state prevailing wage rates to all workmen employed in the execution of the contract and specify forfeitures and penalties for failure to do so. The minimum state wage rates to be paid are those determined by the State Director of the Department of Industrial Relations. Section 1776 requires the Contractor and all Subcontractors to keep accurate payroll records, specifies the contents thereof, their inspection and duplication procedures, and certain notices required of the Contractor pertaining to their location.

Apprentices

Section 1777.5 requires the Contractor or Subcontractor employing tradesmen in any apprentice able occupation to apply to the Joint Apprenticeship Committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen to be used in the performance of the contract.

The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprentice able trade and if other Contractors on the public works site are making such contributions.

Information relative to apprenticeship standards, contributions, wage schedules and other requirements may be obtained from the State Director of Industrial Relations or from the Division of Apprenticeship Standards.

Clayton Act and Cartwright Act

Section 4551 of the State Government Code specifies that in executing a public works contract with the Agency to supply goods, services or materials, the Contractor or Subcontractors offers and agrees to assign to the Agency all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 commencing with Sec. 16700) of Part 2 of Division 7 of the Business and Professions Code, arising from purchase of goods, services or materials pursuant to the contract or subcontract. This assignment shall become effective when the Agency tenders final payment to the contractor without further acknowledgment by the parties.

CITY OF IMPERIAL SPECIAL PROVISIONS

for

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

MODIFICATIONS TO: STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION PART I - GENERAL PROVISIONS

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS AND SYMBOLS

1-2 <u>DEFINITIONS</u>.

- City City of Imperial
- Board City Council
- Caltrans California Department of Transportation
- County County of Imperial
- Engineer City Engineer
- Federal United States of America
- State State of California

SECTION 2 - SCOPE AND CONTROL OF THE WORK 2-1 AWARD AND EXECUTION OF CONTRACT

<u>AWARD AND EXECUTION OF CONTRACT.</u> Is amended as follows:

Within ten (10) working days after the date of the Notice of Award, the Contractor shall execute and return the following contract documents to the Agency:

- ~ Contract Agreement
- ~ Faithful Performance Bond
- ~ Payment Bond
- ~ General Liability Endorsement
- ~ Automobile Liability Endorsement
- ~ Worker's Compensation/Employers Liability Endorsement

Failure to comply with the above will result in annulment of the award and forfeiture of the Proposal Guarantee.

The Contract Agreement shall not be considered binding upon the City until executed by the authorized City officials.

A corporation to which an award is made may be required, before the Contract Agreement is executed by the City, to furnish evidence of its corporate existence, of its right to enter into contracts in the State of California, and that the officers signing the contract and bonds for the corporation have the authority to do so.

2-4 CONTRACT BONDS.

add the following:

Both the Faithful Performance Bond and the Payment Bond shall each be for not less than one hundred percent (100%) of the total contract amount. The Payment Bond shall remain in force until thirty-five (35) days after the date of recordation of the Notice of Completion. The Faithful Performance Bond will not be released until one year after said date. 2-5 <u>PLANS AND SPECIFICATIONS</u>. 2-5.1 <u>General</u>.

the first paragraph is amended as follows:

The Contractor shall maintain a control set of Plans and Specifications on the project site at all times. All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on this control set to show the record conditions. Upon completion of all work, the Contractor shall return the control set to the Engineer. Final payment will not be made until this requirement is met.

2-9 <u>SURVEYING</u>

2-9.3 <u>Survey Service</u>.

Is amended as follows:

CITY shall obtain and pay for the construction staking services of a surveyor as needed to perform the work. The City will provide the services of a properly licensed surveyor to establish control points and relocate survey monuments before construction begins. Contractor shall protect existing survey monuments.

SECTION 3 - CHANGES IN WORK

3-2 <u>CHANGES INITIATED BY THE AGENCY</u> 3-2.1 <u>General</u>.

add the following:

The term "Contract Price" as specified herein shall serve to mean the total dollar value of the Contractor's original bid for all of the various items of work combined and shall not be construed to mean the subtotal shown for any singular item of work.

3-3 <u>EXTRA WORK</u> 3-3.2 <u>Payment</u>

3-3.2.3 <u>Markup</u>.

add the following as the first paragraph:

The markups mentioned hereinafter shall include, but are not limited to, all costs for the services of superintendents, project managers, timekeepers, and other personnel not working directly on the change order and pickup or yard trucks used by the above personnel. These costs shall not be reported as labor or equipment elsewhere except when actually performing work directly on the change order and then shall not be reported at the labor classification of the work performed.

SECTION 4 - CONTROL OF MATERIALS 4-1

MATERIALS AND WORKMANSHIP

4-1.4 Test of Materials.

add the following:

TESTING LABORATORY SERVICES

All tests which require the services of a laboratory to determine compliance with the Contract Documents shall be performed by an independent commercial testing laboratory acceptable to the Engineer, according to the City's Quality Assurance Program (QAP).

TESTING SERVICES FURNISHED BY CITY

The City shall pay all charges of testing laboratories for quality control tests made in the field or laboratory on concrete, asphalt mixtures, moisture-density (Proctor and relative density tests on embedment, fill, and backfill materials, in-place field density tests on embedment's and fills), and other materials and equipment, during and after their incorporation in the Work, except re-testing which shall be paid by Contractor. Field sampling and testing will be performed by the City's independent commercial testing laboratory, in the general manner indicated in the specifications, with minimum interference with construction operations. The independent commercial testing laboratory shall determine the exact time and location of field sampling and testing, according to the City's Quality Assurance Program (QAP), and, may require such additional sampling and testing as necessary to determine that materials and equipment conforms with data previously furnished by Contractor and to the Contract Documents.

Samples and test specimens will be delivered to the testing laboratory by testing laboratory personnel. The testing laboratory shall perform all laboratory tests within a reasonable time.

Contractor shall furnish all sample materials and cooperate in the sampling and field testing activities, interrupting the Work when necessary. When sampling or testing activities are performed in the field by Engineer, Contractor shall furnish personnel and facilities to assist in the activities as required.

The City shall not retain any testing laboratory against which Contractor has reasonable objection, and if at any time during the construction process the services become unacceptable to Contractor, Contractor may request in writing that such services be terminated.

The request must be supported with evidence of improper testing. If the Engineer determines that sufficient cause exists, the Engineer shall terminate the services and engage a different testing laboratory.

TRANSMITTAL OF TEST REPORTS

Written reports of tests and engineering data furnished by Contractor for Engineer's review of materials and equipment proposed to be used in the Work shall be submitted as specified for Shop Drawings.

The testing laboratory retained by the Engineer will furnish three copies of a written report of each test performed by laboratory personnel. Two copies of each test report will be transmitted to the engineer and one copy to the Contractor within three working days after each test is completed.

SECTION 5 - UTILITIES

5-1 <u>LOCATION.</u> add the following paragraph:

The Contractor shall notify the utilities designated in the General Specifications at least 48 hours in advance of excavating around any of their structures.

SECTION 6 - PROSECUTION, PROGRESS, AND ACCEPTANCE OF THE WORK

6-1 <u>CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK</u>.

is amended as follows:

The Contractor's proposed Construction Schedule shall be submitted to the Engineer within ten (10) working days after the date of the Notice of Award of Contract. The schedule shall be supported by written statements from each supplier of materials or equipment indicating that all orders have been placed and acknowledged, and setting forth the dates that each item will be delivered.

The Construction Schedule shall include the timeframes necessary to conduct those studies, testing and reports, prior to the star of construction or commencement of work, in coordination with the City of Imperial pursuant to the Project Environmental Conditions listed on Appendix E (See also Scope of Work under the General Specifications).

Prior to issuing the Notice to Proceed, the Engineer will schedule a pre-construction meeting with the Contractor to review the proposed Construction Schedule and delivery dates, arrange the utility coordination, discuss construction methods, and clarify inspection procedures, including City's Quality Assurance Program, City Staff and/or City Consultants designated to the project, etc..

The Contractor shall submit periodic Progress Reports to the Engineer by the tenth day of each month. The report shall include an updated Construction Schedule. Any deviations from the original schedule shall be explained. Progress payments will be withheld pending receipt of any outstanding reports.

- 6-7 <u>TIME OF COMPLETION</u>.
 - 6-7.1 General.

add the following:

The time for completion shall be 20 working days from the issuance date of the Notice to Proceed.

6-7.2 Working Day.

is amended as follows:

The Contractor's activities shall be confined to the hours between 7:00 AM and 6:00 PM, Monday through Friday, excluding holidays. Deviation from these hours will not be permitted without the prior consent of the Engineer, except in emergencies involving immediate hazard to persons or property.

In the event of either a requested or emergency deviation, inspection service fees will be charged against the Contractor. The service fees will be calculated at overtime rates including benefits, overhead, and travel time. The service fees will be deducted from any amounts due the Contractor.

6-9 <u>LIQUIDATED DAMAGES</u>.

the last sentence is amended as follows:

For each consecutive calendar day in excess of the time specified, as adjusted in accordance with Subsection 6-6, for completion of the work the Contractor shall pay to the Agency, or have withheld from monies due it, the sum of **\$827.00** per day.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-1 <u>CONTRACTOR'S EQUIPMENT AND FACILITIES</u>. add the following:

A noise level limit of 86 db at a distance of fifty feet (50') shall apply to all construction equipment on or related to the job whether owned by the Contractor or not. The use of excessively loud warning signals shall be avoided except in those cases required for the protection of personnel.

7-2 <u>LABOR</u>.

7-2.2 <u>Laws</u>.

add the following:

The Contractor, and all subcontractors, suppliers and vendors, shall comply with all Agency, State, and Federal orders regarding affirmative action to ensure equal employment opportunities and fair employment practices. Failure to file any report due under said orders will result in suspension of periodic progress payments.

The Contractor shall ensure unlimited access to the job site for all equal employment opportunity compliance officers.

7-3 <u>LIABILITY INSURANCE</u>.

the entire Subsection is amended as follows:

7-3.1 Indemnification. The Contractor shall indemnify and save harmless the CITY OF IMPERIAL and the County of Imperial from all claims or suits for damages arising from his prosecution of the contract work, as more fully described in Subsection 7-3.2 "Contractor's Liability".

The Contractor shall maintain during the life of the contract a protective liability policy. The policy shall provide for not less than the following amounts:

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Bodily Injury	\$1,000	,	each person	
	\$2,000	,000	each accident	
	· \$2,000	,000	aggregate products and	
. .			completed operations	
Property Damage	\$ 500,000	each acci	each accident	
			Worker's Compensation Statutory	

All liability insurance policies shall bear an endorsement or shall have attached a rider whereby it is provided that, in the event of expiration or proposed cancellation of such policies for any reason whatsoever, the Agency shall be notified by registered mail, return receipt requested, giving a sufficient time before the date thereof to comply with any applicable law or statute, but in no event less than 30 days before expiration or cancellation is effective. The following statement shall be included on the insurance certificate:

"Additional Insured: The insurer agrees that the City and its City Council, and/or all City Council appointed groups, committees, boards and any other City Council appointed body, and/or elective and appointive officers, servants or employees of the City when acting as such are additional insured hereunder, for the acts of the insured, and such insurance shall be primary to any insurance of the City."

The Contractor agrees to protect, defend and indemnify the CITY OF IMPERIAL against loss, damage or expense by reason of any suit, claims, demands, judgments and causes of action caused by the Contractor, his employees, agents or any subcontractor or by any third party arising out of or in consequence of the performance of all or any operations covered by the Certificate of Insurance. The Contractor, at his option, may include such coverage under his Public Liability coverage.

7-3.2 Contractor's Liability.

The CITY OF IMPERIAL, its City Council, or the Engineer shall not be answerable or accountable in any manner, for any loss or damage that may happen to the work or any part thereof: or for any of the materials or other things used or employed in performing the work; or for injury to any person or persons, either workmen or the public; or for damage to adjoining property from any cause which might have been prevented by the Contractor, or his workmen, or any one employed by him; against all of which injuries or damages to persons and property the Contractor having control over such work must properly guard. The Contractor shall be responsible for any damage to any person or property resulting from defects or obstructions at any time before its completion and final acceptance, and shall indemnify and save harmless the CITY OF IMPERIAL, its City Council, and the Engineer from all suits or actions of every name and description, brought for, or on account of, any injuries or damages received or sustained by any person or persons, or by the Contractor, his servants or agents, in the construction of the work or by or in consequence of any negligence in guarding the same, in improper materials used in its construction, or by or on account of any act or omission of the Contractor or his agents, and so much of the money due the Contractor under and by virtue of the Contract as shall be considered necessary by the City may be retained by the City until disposition has been made of such suits or claims for damages aforesaid.

If, in the opinion of the Engineer, the precautions taken by the Contractor are not safe or adequate at any time during the life of the Contract, he may order the Contractor to take further precautions, and if the Contractor shall fail to do so, the Engineer may order the work done by others and charge the Contractor for the cost thereof, such cost to be deducted from any moneys due or becoming due the Contractor. Failure of the Engineer to order such additional precautions, however, shall not relieve the Contractor from his full responsibility for public safety.

7-5 <u>PERMITS</u>.

the first sentence is amended as follows:

Prior to the start of any work, including "pot holes" and excavation to determine depth of existing underground utilities, the Contractor shall take out the applicable Agencies permits

and make arrangements for Agencies inspections, i.e. County of Imperial, City of Imperial, Imperial Irrigation District. The Contractor and all subcontractors shall each obtain any and all other permits, licenses, inspections, certificates, or authorizations required by any governing body or public utility. The City of Imperial will reimburse the permit fees paid by Contractor to said agencies or public utilities. The City will waive the City's usual encroachment permit fees.

7-10 <u>PUBLIC CONVENIENCE AND SAFETY</u>.

7-10.1 Traffic and Access.

add the following:

When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic. The Contractor shall notify all affected property owners of the proposed schedule a minimum of 48 hours, but not more than 72 hours, in advance of any limitation or closure of access to their property. Form of said notice shall be as approved by the Engineer and shall contain the date and time of the closure. In the event of delay, whether beyond the control of the Contractor or not, the Contractor shall notify all affected property owners as to the extent of the delay and his revised schedule. In the event of delay over 72 hours, the Contractor shall re-notify the property owners as described above.

The Contractor shall notify the following public agencies –but not limited to: California Highway Patrol, US Border Patrol, County Fire Department, County Sheriff, Imperial County Department of Public Works, Imperial Valley College, other, of the proposed project schedule, a minimum of 48 hours, but not more than 72 hours, in advance of any access limitation, detour or closure of the project site.

Payment for notification and coordination as per Section 7-10 as modified herein shall be included in the compensation paid for the various items of work and no additional compensation will be allowed.

7-10.2 Storage of Equipment and Materials in Public Streets.

add the following:

The Contractor shall assume full responsibility for any damage caused by stockpiling and shall repair same at his expense. The Contractor shall also be responsible for providing traffic control as required to protect the public from hazards caused by stockpiling within the right of way. Payment for the above, if any, will be deemed as included in the items of work and no additional compensation will be allowed.

The Contractor may, at his own expense, maintain and operate a work and storage area outside of the public right-of-way.

In such case the Contractor shall submit to Agency written authorization from the owners of the subject property prior to occupation. Occupation of site without written authorization shall be grounds for immediate suspension of work. Location of site to be approved by Agency. Condition and operation of yard shall conform to these specifications. The Contractor shall assume full responsibility for all damage to the site resulting from his operations and shall repair and/or replace same, at his own expense, to the satisfaction of the owner of the subject property. The Contractor shall vacate site and return it to pre-project condition within five (5) working days following application for Notice of Completion. The Contractor shall obtain a written release from the property owner accepting the condition of the vacated site and releasing the Contractor from any further clean-up or restoration work and shall submit a copy of such release to Agency. The Notice of Completion will not be issued until said release is submitted.

7-10.3 Street Closures, Detours, and Barricades.

add the following:

The Contractor shall maintain the minimum traffic requirements designated in the General Specifications. It shall be the Contractor's responsibility to furnish a detailed detour signing and barricade plan for Agency approval.

The Contractor shall be responsible for providing temporary access to all driveways at the end of each workday.

The Contractor shall provide and maintain all other signs, barricades, pedestals, flashers, delineators and other necessary facilities for the protection of the public within the limits of the construction area. He shall also post proper signs to notify the public regarding detours and the condition of the roadway, all in accordance with the provisions of the Vehicle Code and the current State of California Department of Transportation Manual of Warning Signs, Lights and Devices for Use in Performance of Work Upon Highways.

The Contractor shall furnish competent flagmen as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered. Flagmen, while on duty and assigned to give warnings to the public of construction and of any dangerous conditions to be encountered as a result thereof, shall perform their duties and shall be provided with the necessary equipment in accordance with the current "Instructions to Flagmen," of the Department of Transportation. The equipment shall be furnished and kept clean and in good repair by the Contractor, at his expense.

Should the Contractor appear to be neglectful or negligent in furnishing warning and protective measures as provided, the Engineer may direct attention to the existence of a hazard and the necessary warning and protective measures shall be furnished and installed by the Contractor at his expense. Should the Engineer point out the inadequacy of warning and protective measures, such action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate his obligation to furnish any pay for these devices.

The Contractor shall distribute notices to all affected residents and businesses at the stated minimum time prior to the start of work:

Excavations, overlays and miscellaneous repairs - 36 hours

The Contractor shall also be required to post "Temporary No Parking" signs along the streets to be resurfaced during each working day, forty-eight (48) hours prior to resurfacing. The "NOTICES" and "Temporary No Parking" signs will be furnished by the Contractor.

The Contractor shall notify the following entities at least forty-eight (48) hours in advance of any street closure, detour or restriction to access:

- 1. City Engineer at 760-355-1152
- 2. Fire Department at 760-355-1191
- 3. Imperial Police Dept. at 760-355-4327
- 4. Imperial County Sheriff's Dept.760-482-6301
- 5. Imperial County Public Works Dept. 760-482-4462

Full compensation for conforming to this article shall be considered as included in the various items of work involved, and no additional compensation will be allowed therefore.

7-10.4 Safety.

7-10.4.1

Safety Orders. add the following:

CONSTRUCTION SAFETY ORDERS

The Construction Safety orders of the State of California, Department of Industrial Relations, effective November 15, 1975, and as amended, shall be applicable to the work in this contract. The Contractor's special attention is directed to:

Article 6 Excavations, Trenches and Earthwork

Article 11 Traffic Control, Flagmen, Barriers and Warning signs; and

**Article 28 **

Miscellaneous Construction Equipment prior to the start of work, the Contractor will be required to obtain a permit from the Office of the Division of Occupational Safety and Health. The office serving the Imperial area is at 7807 Convoy court, Suite 140, San Diego, California 92111, Telephone Number; (619) 637-5534.

The Contractor shall provide the City Engineer's office with a copy of the permit prior to the start of excavation, and the permit shall be maintained on the job site at any timework requiring trenching or shoring operations exist.

Where excavation of any trench 5 feet or more in depth is required, the Contractor shall submit to the City Engineer for approval, in writing, two weeks in advance of excavations, a detailed plan showing the design of shoring bracing, sloping, protection of existing utilities, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench. If such plan varies from shoring system standards established by the Construction Safety Order. The plan shall be prepared by a Registered Civil or Structural Engineer.

Copies of said regulations are available from the documents Section, P.O. box 20191, Sacramento, California 95820. The cost of furnishing labor, tools, equipment, services and items required thereby shall be borne by the Contractor as part of this contract work and he shall not be entitled to additional compensation for compliance with said regulations.

7-15 PAYROLL RECORDS.

add the following paragraph:

Payroll records shall be submitted to the Agency by the tenth day of each month. Progress payments will be withheld pending receipt of any outstanding reports.

SECTION 9 - MEASUREMENT AND PAYMENT

9-3 <u>PAYMENT</u>.

9-3.2 Partial and Final Payment.

the last paragraph is amended as follows:

The closure date for periodic progress payments will be five (5) working days prior to the first Monday of each month.

The final progress payment will not be released until the Contractor returns the control set of Plans and Specifications showing the as-built conditions.

The full five percent (5%) retention will be deducted from all payments. The final retention will be authorized for payment thirty-five (35) days after the date of recordation of the Notice of Completion.

In conformance with the Public Contracts Code, Section 22300, the Contractor may substitute securities for any monies withheld by the Agency to secure performance under the contract.

At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the Agency or with a State or Federally chartered bank as the escrow agent who shall pay such monies to the Contractor upon notification by Agency of Contractor's satisfactory completion of the contract. Actual pay quantity measurements will be done at the end of each working day and agreed upon by both the Contractor and the Engineer's representative. The type of securities deposited and the method of release shall be approved by the

City Attorney's office.

9-3.3 <u>Delivered Materials</u>.

is amended as follows:

Materials and equipment delivered but not incorporated into the work will not be included in the estimate for progress payment, subject to the discretion of the City Engineer.

9-3.4 <u>Dewatering</u>.

is amended as follows:

The Contractor may encounter groundwater or water from other sources during excavation. The Contractor shall provide and maintain at all times during construction, ample means and devices with which to promptly remove and properly dispose of all water from any source entering the excavations or other parts of the work. Dewatering shall be accomplished by methods, which will ensure a dry excavation and preservation of the final lines and grades of the bottoms of excavations.

Dewatering shall commence when groundwater is first encountered, and shall be continuous until such times as water can be allowed to rise in accordance with the provisions of this section or other requirements.

Disposal of watering from dewatering operations shall be the sole responsibility of the Contractor. Disposal methods shall conforms to the Porter-Cologne Water quality control Act, 1974, the Federal Water Pollution Control Act Amendment of 1972; and the California Administrating code, Title 23, Chapter 3.

The Contractor shall dispose of the water from the work in a suitable manner without damage to adjacent property. Conveyance of the water shall be such as to not interfere with traffic flow or other construction. No water shall be drained into work built or under construction without prior consent of the City Engineer.

Water shall be desanded before disposal in any storm drain system. The system used for desanding the water shall be a baffled structure and shall provide not less than five minutes detention time and shall have a "flow-through" velocity not exceeding 0.2 feet per second at the anticipated peak flow. The desanding box shall be cleaned as required to maintain the detention time and flow-through limitations specified above.

9-3.5 <u>Mobilization</u>.

is amended as follows:

Mobilization shall consist of preparatory work and operations, including but not limited to those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for the work on this project; and for all work and operations which must be performed or cost incurred prior to beginning work on the various contract items on the project site.

The compensation paid for mobilization shall be full compensation for all costs incurred by the Contractor for doing all the work involved in mobilization as specified herein. Payment for mobilization will be included in the items of work listed in the **BID PROPOSAL**.

PART II – CONSTRUCTION MATERIALS

All CONSTRUCTION MATERIALS AND CONSTRUCTION METHODS shall be according to the latest edition of the State of California Department of Transportation (CALTRANS) Standard Specifications, and according to the CONSTRUCTION PROJECT PLANS called for in APPENDIX F.

NOTE: Bituminous Materials using "Terminal Blend" products and/or materials, will not be accepted, neither for the ARAM Interlayer or for the Asphalt Rubber Hot Mix Overlay.

PART III - CONSTRUCTION METHODS

All CONSTRUCTION MATERIALS AND CONSTRUCTION METHODS shall be according to the latest edition of the State of California Department of Transportation (CALTRANS) Standard Specifications, and according to the CONSTRUCTION PROJECT PLANS called for in APPENDIX F.

Miscellaneous Provisions

TRAFFIC CONTROL

All traffic control for the project shall be in accordance with the Special Provisions and the latest edition of the California Manual on Uniform Traffic Control Devices (California MUTCD) and the latest edition of the "Construction Area Traffic Control Devices" of CALTRANS Standard Specifications.

SUBMITTALS

The Contractor shall submit eight (8) copies of the following shop drawings to the Engineer for review and approval at least ten (10) days before drawings will be required for ordering materials and commencing the work. Each shop drawing and sample submission shall bear a stamp or specific written indication that the Contractor has satisfied the Contractor's review and approval of that submission. The Contractor shall provide specific written notice of any variations that the shop drawings may have from the requirements of the Contract Documents.

Within 8 calendar days of receipt of shop drawings, the Engineer will return two (2) copies of each drawing to the Contractor with his comments thereon. If so indicated, the Contractor shall make corrections required by the Engineer and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review and approval. The Engineer's review and approval of Shop Drawings or samples shall not relieve the Contractor from responsibility for any variation from the requirements of the Contract Documents. Shop drawings shall be submitted but not limited to the following items:

- A. The Contractor shall submit manufacturer's mill specification sheet listing diameter, thickness, and class of steel used in making the jacked casing, and the mil certification.
- B. The Contractor shall submit drawings showing the location of approach trench, jacking pit, tunnel and receiving pit, and joint type for both casing and carrier pipe.
- C. The Contractor shall submit a tunnel construction schedule, which includes casing installation, carrier pipe installation, approach trench backfill, and receiving pit backfill.

- D. The Contractor shall submit shoring plans for review to the City Engineer. Shoring plans must be prepared and approved by a registered Civil or Structural Engineer.
- E. The Contractor shall submit drawings of the precast reinforced concrete manholes and appurtenances, including structural calculations prepared and approved by a Registered Civil or Structural Engineer.
- F. The Contractor shall submit manufacturer's specification and information and regarding to all materials to be used on the work site.

PRESERVATION OF MONUMENTATION

The Contractor shall be responsible for protecting all existing horizontal and vertical survey controls, monuments, ties and benchmarks located within the limits of the project. If any of the above require any removal, relocating or resetting, the Contractor shall, prior to any construction work and under the supervision of a California-licensed surveyor or pre-1972 licensed civil engineer, establish sufficient temporary ties and bench marks to enable the points to be reset by the Contractor after completion of construction.

Any ties, monuments and bench marks disturbed during construction shall be reset after construction per City of Imperial or County of imperial standards, as applicable, and the tie notes submitted to the City of Imperial or County of Imperial on 8-1/2" x 11" note paper. The Contractor and its sureties shall be liable for, at its expense, any resurvey required due to its negligence in protecting existing ties, monuments, bench marks or any such horizontal and vertical controls.

The Contractor shall comply with The Land Surveyors Acts #9771 (Record of Surveys-Monumentation) and #8773 (Corner Records-Records of Survey for "Lost Corners").

NOTES

Note 1: The "Standard Specifications" being referenced on the information and the forms provided under this **Appendix C**, are the latest edition of "CALTRANS Standard Specifications".

Appendix A has been prepared by the City's Projects Manager / Consultant, as certified below, for the:

Pavement Rehabilitation of Various Roads in the City of Imperial BID NO. <u>2024-06</u>

Appendix A California State General Prevailing Wage Rates

THE CONTRACTOR SHALL CHECK WITHIN 10 DAYS OF THE BID OPENING THE LATEST WAGE RATES

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Appendix B Specifications and Special Provisions

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SPECIFICATIONS

1.1 STANDARD SPECIFICATIONS

The work embraced herein shall be done in accordance with the appropriate provisions of construction details as shown in the specifications entitled "State of California, Department of Transportation Standard Specifications 2010" insofar as the same may apply. Also portions of the work shall be done in accordance with the "GREENBOOK" Standard Specifications for Public Works Construction 2012 Edition. These specifications are hereinafter referred to as the Standard Specifications and in accordance with the following provisions:

Whenever in the Standard Specifications the following terms are used, they shall be understood to mean to refer the following:

Department of Public Works or Division of Highways - City of Imperial, California Director

of Public Services - The Director of Public Services of the City of Imperial, California.

Engineer – The City Engineer, acting directly or through properly authorized agents, such agents acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

Laboratory – The designated laboratory authorized by the City of Imperial to test materials and work involved in the contract.

State - The City of Imperial, California.

Other terms appearing in the Standard Specifications, the General Conditions and these Special Provisions, shall have the intent and meaning specified in the Sections 1, "Definitions of Terms", Standard Specifications. In case of conflict between the Standard Specifications and these General Conditions and Specifications, the General Conditions and Specifications shall take precedence over and be used in lieu of such conflicting portions.

1.2 SCOPE OF WORK

The work shall include grinding of existing asphalt concrete pavement, installation of conventionalasphalt concrete leveling course, asphalt-rubber aggregate membrane, gap graded asphalt-rubber hot mix, and traffic control.

END OF SPECIFICATIONS

SPECIAL PROVISIONS

1. ORDER OF WORK

Prior to commencement of any work on the project, a preconstruction conference will be held for the purpose of review and discussion of progress schedule and construction procedures. At the discretion of the Director of Public Services, periodic meetings involving project personnel (Contractor, utility and others) will be held for the purpose of coordinating project activities.

2 STARTING AND COMPLETION OF WORK

The work called for in these contract documents shall commence within (10) calendar days after that date set out in the **Notice-to-Proceed** issued by the City, and shall be diligently pursued to completion within <u>Ninety</u> (90) working days of said date.

3. FAILURE TO COMPLETE ON TIME AND LIQUIDATED DAMAGES

It is agreed by the parties of the contract that in case of all work called for under the contract is not completed before or upon the expiration of the time limits set forth in these Special Provisions, damages will be sustained by the City of Imperial and that it will be impracticable to determine the actual damage by which the City will sustain in the event of and by reason of such delay and it is therefore agreed that the contractor will pay to the City of Imperial the sum of three hundred dollars (\$500.00) per day for each and every day delay beyond the time prescribed to complete the work.

4 MAINTAINING TRAFFIC

The Contractor shall maintain two-way traffic in the work area in accordance with the "Manual of Uniform Traffic Control Devices" (MUTCD), 2010 Edition or as modified, available through the State of California, Department of Transportation, 1900 Royal Oaks Drive, Sacramento, California 95815.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way at any time, including any section closed to public traffic.

The contractor shall make every effort to keep driveways open during working hours. After work hours, all driveways shall be accessible and safe. The payment for item shall be included in the bid price for the applicable item of work for which traffic control is performed.

5. NOTICE AND POSTING REQUIREMENTS

CITY shall post and remove temporary "No Parking" signs as needed. Signs shall be in place for at least 48 hours in advance of commencing of work. Signs may be attached to existing poles, parkway trees, or any available support that may exist in the public right-of-way or the contractor may furnish sign supports as may be necessary.

Multiple notices shall be delivered and hung on door handles of each residence and to each business affected by the construction. The format and content of the notices shall be submitted to the Engineer for approval at least 2 weeks prior to use. Notices will be required as follows:

- A general notice in all cases will be required 2 weeks in advance of work, describing the sequence of activities that will affect parking and access to properties, to be delivered 2 weeks prior to construction. This notice will generally address parking and access for street resurfacing with further details to follow on subsequent notices, except detailed information will be required in this first notice to explain the leveling course portion of the work.
- 2) A notice prior to ARAM, with specifics about parking and access, to be delivered 48 hours prior to construction.
- 3) A notice prior to Slurry, with specifics about parking and access to be delivered 48 hours prior to construction.
- 4) A combined notice about System III, that includes specifics about both ARAM and ARHM-GG overlay to be delivered 48 hours prior to construction.

Notice numbers 1), 2) and 3) shall be delivered for System I and System II. Notice numbers 1) and 4) shall be delivered for System III.

6 <u>CONSTRUCTION AREA SIGNS</u>

The Contractor shall furnish, install, maintain, and remove all construction area signs in conformance with the plans and Sections 12-3.06 of the Standard Specifications.

7. <u>REPAIR EXISTING ROADBED</u>

Where directed by the Director of Public Works, broken or failed, or other unsatisfactory portions of the existing roadbed shall be removed and disposed of and the resulting excavation shall be filled with asphalt concrete pavement in conformance with specifications and to be compensated by applicable bid item.

8 <u>REMOVE PAVEMENT MARKINGS</u>

Existing pavement markers, when no longer required for traffic lane delineation as directed by the Director of Public Works, shall be removed and disposed of.

Full compensation for removing and disposing of pavement markers shall be considered as included in the contract price for the applicable bid item for roadway surfacing and no separate payment will be made therefore.

9. ASPHALT CONCRETE LEVELING COURSE

The work shall consist of installing asphalt concrete Type A ¹/₂-inch Hot Mix Asphalt conforming to Section 39 of Caltrans Standard Specifications 2010. The Contractor shall submit for approval to the City Engineer a Caltrans signed and verified Job Mix Formula (JMF) on Caltrans Form CEM 3513, 15 days prior to the beginning of the work.

9.01 Placing

All holes and cracks exceeding 2 inches deep by 5 inches wide by 7 inches long in all 3 dimensions shall be filled with asphalt concrete approved for skin patch compacted level with the top of the existing pavement. All cracks and joints 1/4 inch or greater in width shall be blown thoroughly clear with high pressure air or power broomed clean to a depth of 3/4-inch min. prior to final sweeping just ahead of leveling course.

Tack coat on all feathered areas and cold milled areas shall be SS-1h applied at .48 liters per square meter (.12 gal/sy).

The Contractor shall place asphalt concrete with a self-propelled asphalt paving machine. Contractor shall provide a 20 foot long automatic screed control on both sides of the paving machine for all paving with paving machine, as directed by Engineer.

Each paving machine used will require a paving foreman for each machine along with a full set of rollers as specified and two rakers and one shoveler laborer as a minimum.

Asphalt concrete shall be placed at a minimum thickness of ³/₄-inch. Non-uniform surface voids or scraped rock surfaces on the surface of the mat behind the screed will be considered indication of aggregate particle conflicts between screed and existing grade, resulting in cessation of paving until adjustment of thickness to provide for a smooth surface is provided to the satisfaction of the Engineer.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint. Rubber tire rollers shall be used on any leveling course.

Join lines between successive runs shall be within 150 mm (6 inches) of lane lines or a minimum of 3.6 m (12 feet) outside of the outer most lane line.

9.2 <u>Compaction</u>

The Contractor shall use the following equipment as a minimum:

One pass with a steel wheeled 2-axle tandem vibratory breakdown roller weighing between 10 tons and 12 tons with wheels whose diameter shall measure a minimum of 40 inches.

Two passes with a pneumatic-tired roller weighing not less than 12 tons.

An 8 to 10-ton roller shall perform finish rolling.

9.3 <u>Payment</u>

Payment of this item complete shall be by the English ton for leveling course, and shall be considered to include compensation for all holes and crack preparation as specified in this Section 9 of Special Provisions.

302-9.1 General.

ARHM-GG construction on System III streets shall be performed on a different day than on intersections that are not contiguous with a System III street, without written authorization from the Engineer. Non-conformance with this requirement will be cause to pay for tonnage of pavement in all areas on that day at the lowest of the two tonnage prices.

10. <u>ASPHALT CONCRETE REPAIRS</u>

10.1 Remove and replace Asphalt Pavement

The work under this item shall include removal and replacement of existing asphalt concrete pavement. Repair locations will be as marked by the Engineer on the existing pavement. The perimeter of all repairs shall be sawcut minimum 3-inches deep.

Asphalt replacement shall be performed the same day as removals.

Asphalt concrete used for remove and replace asphalt pavement shall be 3/4" Maximum, Coarse.

Tack coat for vertical joints on repairs in AC shall be uniformly applied as two coats SS-1h applied uniformly at .64 liter per square meter (.20 gal/SY) each coat.

Compensation for Remove and Replace Asphalt Pavement will be made at the unit price bid per ton of asphalt concrete used for the repairs. The price per ton shall include sawcut, excavation and removal, subgrade preparation, tack coat, and placement and compaction of AC and all incidentals.

10.2 Skin Patch

Areas marked with an "S" shall receive a layer of a fine AC mix on existing pavement. The AC mix design shall be submitted to the Engineer for review and approval at least 5 working days prior to use on the project. Pavement shall be allowed to dry prior to placement of any material and a torch shall be used to evaporate and thoroughly dry out any residual dampness prior to application of tack coat. Tack coat shall be applied in all areas to be paved, but no more than 10 minutes ahead of paving in wet areas. AC skin patch material shall be placed in the depressed area slightly below flush with surrounding pavement. Thorough compaction shall be provided by a walk behind roller or other small roller.

Tack coat on all feathered areas around the perimeter of skin patches shall be .13 gal/SY. It is considered extremely important that material used for feathers be rolled above minimum temperature. Contractor shall provide a heated compartment to maintain temperature of material or bring enough material to maintain temperature of the mass of AC until placement is complete.

The unit price bid per square foot for Skin Patch will be considered full compensation for all preparation, tack coat, materials, placement and compaction of skin patch, including all incidentals.

11. <u>SLURRY SEAL</u>

Construction and materials for Emulsion-Aggregate Slurry shall conform to Subsection 203-5 and 302-4 of the GREENBOOK, except as modified herein.

SECTION 203-5 - EMULSION-AGGREGATE SLURRY

203-5.1 General

Emulsion-aggregate slurry shall be polymer modified.

203-5.2 Materials

Emulsion - aggregate slurry shall be Type II, unless otherwise indicated on the plans, bid schedule or in these specifications. The amount and type of accelerator or retardant used shall be approved by the Engineer, and shall provide for curing sufficiently to support traffic within 2 hours.

Emulsified asphalt shall be CQS-1h.

Prior to the time of delivery of each shipment of asphalt emulsion, the Contractor shall deliver to the City certified copies of the test report for that emulsion. The test report shall indicate the name of the vendor, type and grade of asphalt emulsion, date and point of proposed delivery, quantity, purchase order number, and results of the specified tests. The test report shall be signed by an authorized representative of the vendor, shall certify that the product delivered conforms to the standard specifications and is compatible with the proposed aggregate. Testing shall be accomplished by an accredited materials testing laboratory approved by the Engineer.

Prior to a change of emulsion, Contractor shall thoroughly clean all emulsion tanks and mixing units to prevent any chemical reaction between the two emulsions.

Contractor shall schedule and coordinate the delivery of aggregate to the stockpile(s) such that: (1) deliveries originate at the plant and arrive at the stockpile site within normal work hours on the same calendar day, (2) delivery site and project name are explicitly stated on each delivery ticket, (3) successive deliveries on the same calendar day show the cumulative total for that day, (4) copies of all delivery tickets are delivered to the Engineer before the end of the working day, whereas any delivery tickets not so delivered may be rejected by the Engineer. Any deviation from this process must have the prior approval of the Engineer.

203-5.2.1 Polymer Modified Emulsion. Polymer modified emulsionaggregate slurry shall conform to Table 203-5.2.1(A).

Asphalt emulsions shall be composed of a paving asphalt base uniformly emulsified with water and an emulsifying or stabilizing agent. Polymer modified asphalt emulsions shall also contain a polymer.

The asphalt emulsion shall be homogeneous. Within 30 days after delivery and provided separation has not been caused by freezing, the asphalt emulsion shall be homogeneous after thorough mixing. The polymer used in the manufacture of polymer modified asphaltic emulsion shall be, at the option of the Contractor, either neoprene, ethylene vinyl acetate, or a blend of butadiene and styrene.

The emulsion supplier shall certify that the asphalt residue contains at least 2.5 percent polymer (dry weight) and that the polymer has either been added as a solid polymer to the base asphalt, or has been added in the form of a latex at the time of emulsion manufacture.

Polymer modified emulsified asphalt shall be kept in a suspended state by an agitating mixer operated every 3 days.

(PMCQS1h)		
Properties	<u>Min.</u>	Max.
Tests on Emulsions		
Viscosity SSF, @ 77 F	15.0	90.0
Sieve Test, %		0.3
Storage Stability, 1 day, %		1.0
Residue by Evaporation	57.0	
Particle Charge	Positive	
Tests on Residue from Evaporation Test		
Penetration, 77 F	40.0	90.0
Ductility, 77 F, cm	40.0	
Absolute Viscosity @ 140 F, poise	2,250.0	
Solubility in Trichloroethylene	97.0	
Quantitative Test for Polymer Content Either;		
Torsional Recovery, % or	18.0	
Polymer Content in Residue, wt %	2.5	3.0

TABLE 203-5.2.1(A)

<u>IIIBEE 205-5.2.1(A)</u>

Requirements for Polymer Modified Cationic Quick Setting Emulsions

203-5.6 Test Reports and Certification. A certification of compliance shall be provided at least 48 hours prior to delivery of emulsion to the project.

Testing shall be accomplished by an accredited materials testing laboratory approved by the Engineer. Tests performed shall provide values corresponding to all parameters set forth in the table of requirements for the materials specified.

302-4 EMULSION-AGGREGATE SLURRY

302-4.1 General. After application, slurry shall be rubber tire rolled in all areas. The work to be done consists of furnishing all plant, labor, materials, tools, equipment and services necessary for the application of emulsion-aggregate slurry upon designated ARAM street surface areas.

302-4.2 Mixing

302-4.2.1 General. Transit mix trucks shall not be used. Contractor shall arrange with the City for appropriate areas for stockpiling and batching. The stockpile areas shall be thoroughly cleaned, removing all excess material and all material contaminated by spilled oil, and left with a neat, orderly appearance upon completion of slurry operations in that area. Stockpiles shall be covered as necessary to prevent contamination by all materials including excessive moisture. No equipment or materials shall be stored in the public right-of-way.

All trucks which the Contractor proposes to use that exceed the legal load limit will be required to have overweight permits from the Agency.

Loaders used to load spreader trucks shall be equipped with functioning weighing devices with weight read-outs. The weight of each loader bucket added to a spreader truck shall be logged in writing by Contractor's personnel after each bucket load.

Prior to the beginning of slurry operations, Contractor shall furnish, at no cost to the Agency, a current licensed weigh master's certificate indicating the net weight capacity of the aggregate bin.

Contractor shall supply the Engineer with licensed weigh master's certificates of weights for all aggregate delivered to the job during the course of each day. Aggregate so certified as being delivered for use in the contract shall be used only in the slurry mixture for this contract. Contractor shall also present weigh master's certificates for the amount of such aggregate remaining unused at the completion of the contract at no cost to the Agency. Payment shall be determined by deducting the amount of unused aggregate from the total amount of aggregate delivered, all as shown on the licensed weigh master's certificates. The certificates shall be presented to the Engineer on the same day the aggregate is delivered.

Water (excluding that water in the emulsified asphalt) shall be added at a rate of from 5 to 10 percent by weight of dry aggregate to ensure proper dispersion of the emulsified asphalt and proper workability, while (1) avoiding excess water which would allow separation and settlement of the

aggregate, (2) avoiding insufficient water which would result in balling and coagulation in the mixer, and (3) permitting uncontrolled vehicular traffic as specified herein. The exact rate will be determined by the Contractor based upon field conditions subject to approval of the Engineer.

302-4.2.2 Continuous-Flow Mixers. The mixing unit shall be equipped with a fines feeder for addition of accelerator.

The spreader box shall be equipped with a suitable drag to erase ridges. A minimum 2-foot length of burlap material shall be attached to the entire width of the drag. The spreader box shall be equipped with a steering device.

The slurry spreader box shall be maintained in a good state of repair at all times. The spreader box main strike off squeegee (rubber) shall be new at the beginning of the contract and shall be maintained in a good state of repair throughout the contract.

Equipment shall be available for inspection before the beginning of the contract and again before work is to be accomplished.

302-4.3 Application

302-4.3.1 General. The first paragraph of Subsection 302-4.3.1 of the Standard Specifications is hereby deleted and replaced with the following:

The work shall consist of preparation, mixing asphaltic emulsion, aggregate, accelerator and water, and spreading the mixture on the pavement where shown on the plans. Type II slurry shall be applied at a rate yielding a minimum 1,200 square feet per extra long ton.

Actual spread rates shall be approved by the Engineer.

302-4.3.1.1 Preparation.

Slurry shall not be applied over any manhole, valve, survey monument, or miscellaneous frames and covers. Any material used to protect such devices shall be removed and disposed of lawfully by the Contractor.

302-4.3.2 Spreading. The first sentence of Subsection 302-4.3.2 is hereby deleted and replaced with the following:

Slurry seal shall be placed only when the ambient temperature is above 50 degrees Fahrenheit and rising. No slurry will be placed during inclement weather or the threat of. Contractor will bear the responsibility of that may arise from non- cancellation.

Each slurry crew shall be composed of a coordinator at the project site at all times, a competent quick-set mixing man, a competent driver, and sufficient laborers for any handwork and cleanup.

Prior to commencement of work, Contractor shall perform test sections for review and approval by the Engineer. The area of the test sections shall be at least 5,000 square feet. The section locations shall be in the area of the work, to be specified prior to construction. In no case will the Contractor begin operations until the test sections have adequately cured and he has received written approval by the Engineer. The approved mix design and test section shall be considered the standard for the operation.

No slurry seal shall be placed on a wet street or crossing without the Engineer's consent.

Intersections and commercial driveways shall be completed in two parts to allow ingress and egress to traffic. Sand may be spread over the fresh slurry only with the permission of the Engineer.

All slurried streets shall be fully swept 5 to 8 days after slurry is complete, with residual material removed to a legal disposal site.

The cost of cleanup and/or damage caused by vehicles tracking through the slurry seal will be born solely by the Contractor.

302-4.3.2.1 Rubber Tire Rolling. Rolling shall be performed with two complete coverages by a 12-ton nine-wheel rubber tired roller with a tire pressure of 50 psi. Rolling shall be performed after slurry and as soon as it sets up enough to support the roller and not pick up on the tires.

Areas of shade on the pavement that set up more than 10 minutes later than other areas shall be rolled separately, but as soon as they set up sufficiently to meet the requirements herein. Insufficient rubbertire rollers to meet these requirements shall be cause for termination of slurry operations until rolling can keep pace with slurry spread.

302-4.4 Public Convenience and Traffic Control. The spreading schedule shall list the streets in order of proposed application and denote which streets are to be completed each day.

Traffic control with ample barricades, flaggers, standard regulatory and warning signs, no parking signs, etc., shall be provided to protect the uncured slurry surface from all types of traffic. Any damage to the uncured slurry is the responsibility of the Contractor. Traffic control plan shall be submitted to and approved by the City Director of Public Works prior to commencing work. The Contractor's work will be done on successive adjacent streets during the same day of the operation. Adequate means shall be provided to protect the slurry seal from damage by traffic for a

minimum of four (4) hours of 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 tires of vehicles.

Temporary "No Parking" signs shall be posted at least 48 hours in advance of the work. The signs shall be placed no more than 100 feet apart on each side of the street and at shorter intervals if conditions warrant. The Contractor shall provide the signs and will be responsible for adding the dates and hours of closure to the signs, removal of the signs, and furnishing and placing of barricades, if necessary, for posting of the signs. All signs shall be removed within 48 hours after the effective date.

Contractor shall provide barricades and other traffic control devices as necessary to eliminate traffic on areas of fresh slurry that might sustain damage from such traffic. Any tracking of slurry seal on private property will be the responsibility of the Contractor to correct. Contractor shall sweep the streets for five (5) consecutive days after application of the slurry.

Slurry seal shall not be spread on the trash pickup day of each respective street.

Temporary striping devices shall be provided on all lane lines covered by slurry.

302-4.5 Measurement and Payment. The second paragraph of Subsection 302-4.5 of the Standard Specifications is hereby deleted and replaced with the following:

The contract unit price per square yard shall be considered to include full compensation for furnishing emulsion, polymer as specified, accelerator or retardant and water, and all preparation, traffic control, rubber tire rolling where specified, and other incidentals described in the work and no additional compensation will be provide therefor.

12 <u>ASPHALT-RUBBER HOT MIX – GAP GRADED(ARHM-GG)</u>

ARHM Material shall conform to 203-11 of the GREENBOOK as modified herein and Section 39 of Caltrans Standard Specifications 2010. The Contractor shall submit for approval to the City Engineer a Caltrans signed and verified Job Mix Formula (JMF) on Caltrans Form CEM 3513, 15 days prior to the beginning of the work.

ARHM Construction shall conform to 302-9 of the GREENBOOOK as modified herein.

203-11 ASPHALT-RUBBER HOT MIX (ARHM) WET PROCESS.

203-11.2 Materials.

203-11.2.3 Crumb Rubber Modifier (CRM).

The third and the last sentence of the first paragraph of Subsection 203-11.2.3 are hereby deleted and replaced with the following: The high natural rubber shall be a single source material and not a blend of more than one source. The high natural CRM shall not be tire rubber. A minimum 2-ounce unground and ungranulated sample of the base stock shall be provided, along with a minimum 4-ounce ground or granulated sample. Contractor shall pay for any failed chemical analysis tests.

The fifth paragraph of Subsection 203-11.2.3 is hereby deleted and replaced with the following:

The percentage of high natural CRM shall be equal to 1000 divided by the percentage of natural rubber in the high natural CRM (using whole number percentages), e.g., 1000/40 percent equals 25 percent. The remainder of CRM shall be scrap tires.

The maximum value for Natural Rubber Content in Table 203-11.2.3(B) is hereby deleted.

The sixth (last) paragraph of Subsection 203-11.2.3 is hereby deleted.

203-11.2.4 Aggregate. The text of Subsection 203-11.2.4 is hereby deleted and replaced with the following:

The aggregate for ARHM shall conform to the "quality requirements" for asphalt concrete Type A as specified in Caltrans Standard Specifications, except for the following:

Maximum LA Rattler value at 500 revolutions shall be 35.

Eighty-five percent of coarse aggregate shapes shall be "proportioned particles", a proportioned particle being defined as a particle having a minimum dimension greater than ½ the maximum dimension as measured with a caliper. The percentage of proportioned particles shall be tested by California Test 205 with the words "proportioned particles" substituted for "crushed particles".

California Test 205, Section D, definition of a crushed particle hereby revised as follows: "A particle having 2 or more fresh mechanically fractured faces shall be considered a crushed particle".

203-11.3 Composition and Grading.

The aggregate for Asphalt-Rubber Hot Mix (ARHM-GG) shall conform to following gradations, which shall be considered included as additional columns in Table 203-11.3(A):

Sieve Sizes	<u>TV limits</u>	<u>Allowable</u> tolerance
3⁄4"	100	
1⁄2"	90-100	TV ± 6
3/8"	83-87	TV ± 6
No. 4	28-42	TV ± 7
No. 8	14-22	TV ± 5
No. 200	0-6.0	TV ± 2

½-inch RHMA-G

No mineral filler or material from sand or rock dust bins shall be included in the mix.

The gradation ranges shown in Table 203-11.3(A) shall be considered the Contract Compliance Range. The Operating Range for the ¹/₂" sieve shall be the full contract compliance range. The Operating Range for all other sieves, except the 200 sieve, shall be 2 percentage points inside both limits of the Contract Compliance Range. If gradation-testing results do not meet the Operating Range requirements but meet the Contract Compliance Range, placement of ARHM may be continued for the remainder of the day. However, another day's work shall not be started until tests, or other information, indicate to the satisfaction of the Engineer that the next material to be used in the work will comply with the requirements specified for Operating Range.

Except for the No. 200 sieve, it is the intent of the Specifications that the target percentage be the central value in the Contract Compliance Range.

The asterisk noted under Table 203-11.3(A) is hereby deleted and replaced with the following:

Once the percent asphalt-rubber binder is determined by the mix design, the tolerance shall be +/-0.5% as determined by California Test Method 382, and this tolerance shall be considered to include all sampling and testing tolerances. Variations of binder content on this basis at or exceeding +/-0.5% from the mix design will be cause to terminate paving operations until changes to provide specified tolerances are verified and approved by the Engineer.

Any change in source of aggregate supply requires 2 weeks advance notice in writing to the Engineer, and submittals and testing in conformance with specifications for a new mix design. No single bin shall receive aggregate from more than one source. Contractor shall provide a copy of aggregate delivery tickets for aggregate delivered for use on the project.

The amount of asphalt-rubber binder to be mixed with the aggregate for Asphalt-Rubber Hot Mix Type GG will be determined by the Engineer using the samples of aggregates furnished by the Contractor in conformance with the provisions in Section 39-3.03, "Proportioning," of the Standard Specifications. The Engineer will determine the exact amount of asphalt-rubber binder to be mixed with the aggregate in conformance with the provisions in California Test 368 with the following exceptions. The aggregate shall be mixed with PG 64-16 paving asphalt and the optimum bitumen content shall be determined in conformance with the test procedure. The optimum binder content for Asphalt-Rubber Hot Mix Type GG shall then be determined using the following formula:

A. $OBC_2 = (OBC_1) \times 1.20$

B. OBC_1 = Optimum bitumen content using PG 64-16 paving asphalt

C. OBC₂ = Optimum bitumen content using asphalt-rubber binder

The asphalt-rubber binder content of the Asphalt-Rubber Hot Mix Type GG will be determined by California Test Method 382.

203-11.4 Mixing.

The third paragraph of Subsection 203-11.4 is hereby deleted and replaced with the following:

The proportions of the materials, by total weight of asphalt-rubber binder, shall be 80 percent combined paving asphalt and asphalt modifier, and 20 percent CRM. The temperature of the blended asphalt and modifier shall be between 190 degrees C (375 Fahrenheit) minimum and 226 degrees C (440 Fahrenheit) maximum when the CRM is added. The temperature shall not exceed 6 degrees C (10 Fahrenheit) below the actual flash point of the mixture. The CRM shall be combined and mixed together in an asphalt-rubber mechanical blender meeting the requirements of 203-

11.5. The combined asphalt and CRM shall be pumped into a reaction tank or distributor truck meeting the requirements of 203-11.5, Item 3A). The required mixing/reaction time shall be 90 minutes minimum. The temperature of the asphalt-rubber mixture shall be between 194 degrees C (380 Fahrenheit) minimum to 218 degrees C (425 Fahrenheit) maximum during the reaction period.

After reacting, the asphalt-rubber binder shall conform to the requirements in Table 203-11.4(A). The minimum reaction period shall be the time from complete incorporation of materials into the mix to the time that the asphalt-rubber meets all specifications for reacted material, but no less than 90 minutes. Once established, the minimum reaction period shall remain unchanged, unless there are changes in materials or equipment that may affect rubber digestion, in which case a new reaction period shall be established per specifications. The Engineer's decision shall be final for determination of the minimum reaction period.

All material shall be tested for viscosity and verified as to complete reaction prior to transfer to any storage tank or use of the reaction tank for feet to the hot mix plant. Material reacted lower than specified temperature, but above 185 degrees C (365 F), or transferred to a storage tank prior to completion of reaction as specified, shall be reacted for total period of 3 hours prior to use. Any such transfer shall be described in the comments column of the Asphalt-Rubber Batch Log.

Inability to maintain reaction temperatures above specified minimums will be cause to terminate paving operations. Contractor is reminded that if the reaction tank does not have a gas retort heating system capable of raising the temperature of its contents at least 20 degrees per hour, there exists the inherent potential for such below

minimum temperatures to become an irreversible condition. Certification was previously provided at time of bid opening in the bid that the asphalt-rubber hot mix plant owner, the paving subcontractor, and asphalt-rubber supplier have been made fully aware of these provisions.

Contractor shall test viscosity and record the following information for every tank of asphalt-rubber prior to being transferred to storage or directed to feed to the hot mix plant:

- 1) Temperature of stored asphalt cement material at time of loading
- 2) Time at which the reaction tank is fully loaded
- 3) Tons of asphalt-rubber added to the tank for the batch
- 4) Total asphalt-rubber in the tank after loading
- 5) The beginning time of reaction (Fully loaded and above 380° F)
- 6) Binder temperature at time of sampling
- 7) Temperature of tested material
- 8) Viscosity reading
- 9) Time of viscosity test (All test results must be prior to use.)

If more than 20% of a batch is holdover material, the reaction time may be reduced, but a line item must be provided on the Asphalt-Rubber Batch Log showing items 6), 7) and 8) for a test just prior to loading new material. Reaction shall be considered to begin after all material is added. If more than 20% is holdover material, reaction time can be reduced to the fraction of total material that is holdover material, times 90 minutes, but shall be no less than 20 minutes.

A copy of the Asphalt-Rubber Batch Log shall be provided to the Engineer upon request. A copy of the batch log sheet and all circle charts for the day shall be faxed to the City within 1 1/2 hours of ending production of ARHM for the day. To fit $8\frac{1}{2} \times 11^{-1}$ inch sheets, the circle chart may be faxed in 2 parts with an overlap. See Subsection 203-11.5 for circle chart requirements.

The Maximum value for Haake Field Viscosity @191 degrees C (375 degrees Fahrenheit) in Table 203-11.4(A) is hereby changed to 2400 Centipoise.

The first fully reacted passing sample on each batch, prior to transfer to storage or converting to feed to the ARHM mix plant shall be poured into a clean gallon can that has been pre-certified by the Engineer. It shall be the responsibility of the contractor to ensure that sufficient sample cans with lids are at the plant, such that the can be pre-certified at least three days prior to use. If the Engineer is not at the plant at start up, the Engineer will provide certified labels, which are pre-numbered and signed by Engineer to be affixed to the cans as they are consecutively used by number. The Contractor shall conduct sampling such that the pre-certified sample can numbers correspond to the batch numbers beginning with one at the start of the project, increasing consecutively with each batch, without restarting the count at any point. After testing and recording the information for the batch, the corresponding pre-certified sample can shall be filled and stored for the duration of the project or until the Engineer takes possession of the can.

203-11.4.1 The second and third sentences of Item Number 3 under Test Procedure is hereby deleted and replaced with the following:

In one continuous operation, turn off the spindle rotation, remove the spindle vertically from the binder (after heating), discontinue stirring the binder and immediately insert the spindle back into the center of the binder to full immersion and wait 5 seconds. While holding the viscometer level, turn the spindle on and watch the needle on the viscometer dial and record the maximum value obtained on the dial.

203-11.5 Equipment for production of Asphalt-Rubber.

Add the following to Item 3) of 203-11.5:

A) Reaction Tank. The asphalt-rubber material shall be held in a reaction tank separate from the storage tank feeding the ARHM plant, until the reaction is complete. The reaction tank shall have agitation sufficient to increase the viscosity of the mixture to a peak viscosity reading at least 20 percent higher than the viscosity reading of the material measured at a time that the material otherwise meets specifications for reacted material. The time of reaction may be extended as needed to produce this result. It shall be the responsibility of the Contractor to demonstrate to the Engineer through viscosity readings at appropriate times that the equipment conforms to these requirements. If this cannot be demonstrated, the reaction time shall be 3 hours. Once established, the reaction time shall be the minimum time for reaction unless there are changes in materials or equipment, in which case a new reaction time shall be established per specifications. The Engineer's decision shall be final.

The reaction tank shall have a functioning paper circle chart thermometer device, which shall record tank temperatures whenever asphalt-rubber is in any stage of production. Seven days before production of asphalt-rubber starts, the Contractor shall provide the Engineer approximately double the number of charts estimated to be needed to produce the necessary binder quantity. These charts will be numbered and signed by the Engineer and returned to the Contractor prior to start of production. These signed and numbered charts shall be used throughout production of the asphalt-rubber binder. Charts shall be used in the consecutive order as numbered by the Engineer beginning with number one, and shall be returned weekly after use to the Engineer. Charts will be identified with the date they were used by the Contractor at time of installing on the equipment, and shall be identified as to the tank to which they were attached. Production of asphalt-rubber shall be terminated if this procedure is not followed and will not be restarted until Contractor demonstrates to the Engineer that it is capable of complying with this requirement.

At the start of each production day, the paper chart shall be replaced with a new signed, dated and numbered sheet, the lead scribe shall be sharpened or ink well filled, and the circle chart shall be calibrated against a sample of material drawn early from the first batch of the day. Any calibration adjustments shall be recorded in the appropriate space provided on the batch log sheet. A spare functional circle chart device shall be at the plant at all times for immediate installation should failure occur on a circle chart device being used. Calibration shall be performed as part of such installation. The lack of a functional circle chart device on the reaction tank shall be cause to terminate production of asphalt-rubber binder. A blunt lead scribe or low ink, or a paper chart used on a prior day will be considered to render the device nonfunctional.

- B) Storage Tank. After a complete reaction is verified by viscosity readings acceptable to the Engineer, the material shall be held in a storage tank that is fully isolated from material that is not fully reacted. This tank shall be the only tank feeding the ARHM plant. No material shall be transferred to the storage tank feeding the plant until reaction is complete in the reaction tank.
- 302-9 Asphalt-Rubber Hot Mix (ARHM).

302-9.1 General.

ARHM-GG construction on system III streets shall be performed on a different day than on intersections that are not contiguous with a system III street, without written authorization from the Engineer. Non-conformance with this requirement will be cause to pay for tonnage of pavement in all areas on that day at the lowest of the two tonnage prices.

ARHM-GG shall be complete in all areas prior to slurry.

Tack coat material for overlay shall be SS-lh applied at a rate of 0.32 liter per square meter (0.08 gal/SY) on all areas except on ARAM, where tack coat shall be at a rate of 0.24 liter per square meter (0.05 gal/SY).

All PCC surfaces, to be crossed by trucks used to haul ARHM, that are within 500 feet of the work limits shall be covered with sand or other durable covering prior to applying tack coat.

Contractor shall have sufficient power brooms on site during all periods of distribution and spreading to provide for cleanup of haul routes and work areas. Power broom shall provide miscellaneous cleanup of ARHM spoils as directed by the Engineer.

302-9.2 Mixing Binder with Aggregate.

For drum plants, the system shall run fully automatic with the only input to the AC plant computer being information transmitted automatically from a Corealis mass flow meter on the line of the asphalt-rubber feed to the AC plant. All automatic shutdown features of the AC plant shall be fully functional.

302-9.4 Distribution and Spreading.

The ambient temperature shall not exceed 105F at time of placing ARHM.

The temperature of ARHM shall be minimum 290 degrees Fahrenheit directly behind the paving machine and high enough upon delivery that pavement temperature after two passes with the breakdown roller exceeds 240 degrees Fahrenheit.

To avoid picking up loose rock in the overlay area, the tires of all trucks must be lightly oiled with linseed oil or soy bean oil or approved equal. Diesel fuel will not be allowed on the project at all for oil down of any equipment.

Raking of ARHM shall be eliminated as much as possible. ARHM material shall not be cast across the mat under any circumstance. Raking shall be just enough to set up edges for uniform joins without casting material. Screed controls shall be the predominant means of controlling material at joints. In areas where paving machines can not be used due to space constraints, material shall not be thrown by shovels. Material shall be removed directly from the paving machine hopper and shall be placed directly in its final location, to be distributed with minimal raking. Material may be dumped directly from a truck, but further material distribution shall be by shovel directly to its final location with minimal raking. A small rubber tire tractor with a screed type attachment may be used to spread a pile dumped from a truck, but raking shall be minimized after spreading.

The paving machine screed shall not be pulled across an area already paved with ARHM, even adjacent to narrow areas to be paved. Such narrow areas shall have ARHM distributed by methods specified by shovel or rubber tire tractor, unless the adjacent area has hardened enough and will not be significantly marred by passing the screed over it. Even if hardened adequately, Contractor shall spread rock dust by hand tools to avoid cohesion of the ARHM in the screed to the existing surface of such areas of freshly cured ARHM.

Contractor shall maintain a functioning infrared heat measurement device in close proximity to each paving machine at all times. Contractor shall provide a pavement temperature reading, with an infrared heat measurement instrument, when requested by the Engineer. Inaccessibility of a heat measurement shall be cause for termination of paving operations.

Transverse cold joints shall be provided such that longitudinal joints are not left exposed at the end of the workday.

Contractor shall provide 20 foot long automatic screed control on both sides of the paving machine for all paving with paving machine, as directed by Engineer.

302-9.5 Rolling.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint.

Join lines between successive runs shall be within 150 mm (6 inches) of lane lines or a minimum of 3.6 m (12 feet) outside of the outer most lane line.

Initial breakdown rolling shall be static. Breakdown roller shall make two passes over all areas. A pass shall mean one passage of the roller over an area.

An intermediate roller of the same or greater width than the breakdown roller shall be rolling directly behind the breakdown roller at all times, and paving shall cease if intermediate rolling is terminated for any reason. Additional intermediate rollers may be necessary depending on production rates. Intermediate roller shall make 2 passes unless otherwise directed or approved by the Engineer.

The rolling pattern shall be approved by the Engineer and once established, the rolling pattern shall remain consistent, unless conditions change and a modified rolling pattern is needed to conform to specification. Engineer shall be notified immediately on change of rolling pattern.

All finish rolling shall be performed by a separate finish roller.

To ensure optimum quality control, the use of more than one paver must be approved in advance by the Engineer, and will generally require one foreman, one sweeper, and a full complement of rollers per Subsection 302-5 of the Standard Specifications and this Subsection 302-9.5 for each paving machine.

An extra breakdown roller shall be on site at all times, free of defects.

A finish roller shall be provided in addition to intermediate rolling to perform all finish rolling, such that the intermediate roller can stay immediately behind the breakdown roller at all times.

302-9.6 Rock Dust Blotter. The second sentence of Subsection 302-9.6 is hereby deleted and replaced with the following:

Rock dust blotter shall be washed concrete sand per Fine Aggregate in Section 90, spread at rate of 2 to 3 pounds per square yard as necessary to maintain traffic at the direction of the Engineer. Excess sand spread on adjoining areas to receive ARHM-GG shall be thoroughly swept before spreading any binder.

12.01 Warranty

The Contractor shall warranty the materials and workmanship of the Asphalt-Rubber Hot Mix (Type GG), for a period of 365 days, and shall repair defects identified during the warranty period, in conformance with these special provisions. The warranty period shall start upon acceptance of the pavement.

During the warranty period, should an area of ARHM (TypeGG) be found to be defective, the Engineer will notify the Contractor in writing of the areas to be repaired. The Contractor shall complete the repairs within 60 days from the date of the notification letter, unless the Engineer determines that weather conditions are unsuitable, in conformance with the provisions in Section 8-1.06, "Time of Completion," of the Standard Specifications, for completing the repair work, in which case the Engineer will allow additional time for completion of the repairs.

The Engineer shall decide all questions which arise as to the performance of the Asphalt-Rubber Hot Mix (Type GG) during the warranty period and as to the acceptable fulfillment of the warranty, in conformance with the provisions in Section 5-1.01, "Authority of the Engineer," of the Standard Specifications.

Construction area signs, shown on the plans, shall be removed upon completion of the contract item work, except for work required by the warranty. During the warranty period, the Contractor shall place and maintain signs in conformance with Section 12-3, "Traffic-Handling Equipment and Devices," of the Standard Specifications and these special provisions. Signs shall be, at the Contractor's option, either stationary mounted or portable signs conforming to the provisions in "Construction Area Signs" of these special provisions.

At least 7 days prior to beginning placement of the leveling course under the Asphalt-Rubber Hot Mix (Type GG), the Contractor shall submit to the Engineer a written list of existing defective areas, identifying the lane direction, lane number, starting and ending highway post locations and defect type. Within 7 working days of receiving the list of existing defective areas, the Engineer will review the list and provide the Contractor written approval or revisions of the areas, as being excluded from the warranty.

Alligator pavement shall mean areas of pavement surrounded by cracks on the full perimeter where the maximum dimension of the area within the perimeter is less than 10 inches, and such areas are multiple and clustered together contiguous to each other. Defects in the existing surfacing which may qualify areas for exclusion from the warranty include: Rutting greater than 9mm in combination with flushing of surface pavement as flushing as defined herein in more than 10% of the rutted area; rutting greater than 9 mm in combination with area; rutting greater than 9 mm in combination with area; patches of cold mixed asphalt concrete placed within the last 12 months. Rutting that shall be excluded from the warranty is defined as a longitudinal depression in the wheel path that, when measured by placing a straightedge 3.6 0.06-m long on the finished surface and perpendicular with the center line, varies more than 9 mm from the lower edge of the straightedge, in combination with alligator cracking or flushing in the percentages described above. Segments of the project excluded from warranty for rutting or cracking shall be warranted for the other criteria. Segments repaired by the Contractor shall be warranted for all criteria. Placement of the Asphalt-Rubber Hot

Mix (Type GG) shall not begin until the Engineer has approved the list of existing defective areas, and repairs included in the contract have been made. The Asphalt-Rubber Hot Mix (Type GG) placed over areas shown on the plans or designated by the Engineer to be repaired shall be warranted.

When it is anticipated that there will be a suspension of work of more than 120 days, the Contractor may request in writing that a separate warranty period be established for the portion of Asphalt-Rubber Hot Mix (Type GG) already completed. If the Engineer determines that the designated portion of Asphalt-Rubber Hot Mix (Type GG) work has been completed in conformance with the requirements of the contract, the Engineer will recommend that the Director relieve the Contractor of the duty of maintaining and protecting the designated portion of Asphalt-Rubber Hot Mix (Type GG) work in conformance with the provisions in Section 7-1.15, "Relief from Maintenance and Responsibility," of the Standard Specifications, except for work required by the warranty, and the Engineer will notify the Contractor in writing of the date of the start of the separate warranty period and the date on which the separate warranty period will be complete. The relief from maintenance and responsibility shall apply to the designated portion of Asphalt-Rubber Hot Mix (Type GG) only, and does not constitute completion of a contract item of work. Upon completion of the separate warranty period, no further work will be required on the designated portion of Asphalt-Rubber Hot Mix (Type GG). No separate interim estimate will be prepared for the designated portion of Asphalt-Rubber Hot Mix (Type GG). No more than one separate warranty period will be allowed during the contract.

The following criteria for identifying defective material placed by the Contractor shall apply to the Asphalt-Rubber Hot Mix (Type GG) during the warranty period:

- A. Rutting consists of a longitudinal surface depression in the wheel path which is, when measured by placing a straightedge, 3.6 0.06-m long on the finished surface and perpendicular with the center line varies more than 9 mm from the lower edge of the straightedge for a 20-m length.
- B. Raveling consists of the separation of the aggregate from the binder.
- C. Flushing consists of the occurrence of a film of bituminous material on the surface of the rubberized asphalt concrete (Type GG) which results in a coefficient of friction of less than 0.30, determined in conformance with the requirements in California Test 342.
- D. Delamination consists of the loss of the bond between the layers of pavement.
- E. Pot holes consist of the loss of Asphalt-Rubber Hot Mix (Type GG) material, between 0.008-m² and 0.5-m².

Lengths of each lane with rutting in the Asphalt-Rubber Hot Mix (Type GG) shall have the 20-m length area repaired. Areas in the Asphalt-Rubber Hot Mix (Type GG), of raveling, flushing or delamination that are greater than 0.5-m², and pot holes shall be considered defective and shall be repaired.

Areas of rutting, raveling, flushing and delamination to be repaired shall be removed to 25 mm depth of the Asphalt-Rubber Hot Mix (Type GG), by cold milling in conformance with these special provisions, for the full lane width and the length of the area determined to be defective, plus 2 m on each end measured along the lane line. The area planed shall then be repaired by placing Asphalt-Rubber Hot Mix (Type GG) in conformance with the provisions in "Asphalt-

Rubber Hot Mix (Type GG)" of these special provisions, produced by the same plant and aggregate source as original ARHM-GG.

If the area between 2 consecutive repairs, except repairs of pot holes is less than 6 m in length, measured along the lane line, that area shall also be repaired.

If the total length of repairs, measured along the lane line, exceeds 60-m of any 300 meter length of a lane or shoulder, an additional layer of Asphalt-Rubber Hot Mix (Type GG) in conformance with the provisions in ASPHALT-RUBBER HOT MIX–GAPGRADED(ARHM-GG) of these special provisions, 30 mm in thickness, shall be placed on that 300 meter length on lanes and shoulders. If a continuous area of 60 m or more in length, within that 300 meter length, has not been repaired and does not contain defective areas, the additional layer of Asphalt-Rubber Hot Mix (Type GG) will not be required on that area. If placement of the additional layer will interfere with the location, clearances or function of highway facilities, areas requiring the additional layer shall be removed to the full depth of the Asphalt-Rubber Hot Mix (Type GG), by cold milling and Asphalt-Rubber Hot Mix (Type GG) shall be placed in conformance with the provisions in ASPHALT-RUBBER HOT MIX–GAP GRADED (ARHM-GG) of these special provisions and as shown on the plans.

Areas of rutting, raveling, flushing, delamination, or pot holes which create a condition hazardous to traffic shall be temporarily patched by placing a layer of commercial quality paving grade asphalt concrete over the defective area, or filling pot holes with that material, to provide a temporary traveling surface, or shall be repaired as specified above.

The Contractor shall begin placing temporary patches within 2 days after notification of the condition by the Engineer and shall complete the work within 3 days of that notification.

Upon 3 days after notification of the Contractor, the Engineer may make or cause to be made the needed temporary patches and provide a detailed billing to the Contractor for the work.

The Contractor shall reimburse the City for the work within 60 days of receipt of the billing, or the costs may be deducted from any moneys due or to become due the Contractor under the contract. If the total area of temporary patching placed or to be placed exceeds 5 percent of any 100-m length of a lane or shoulder, the entire lane or shoulder for that 60-m length shall be repaired as specified above, and the temporary patches previously placed in that 100-m length shall be removed prior to placing the repair.

Temporary patches greater than 0.5-m^2 in area shall be removed and a repair placed within 20 days after expiration of the warranty period. If the Engineer determines that a temporary patch provides an acceptable traveling surface, the patch may remain in place.

As an alternative to the materials and methods specified above for repairs and temporary patches, the Contractor may use other materials or methods which will provide performance equal to or better than the Asphalt-Rubber Hot Mix (Type GG) placed in conformance with the provisions in "Asphalt-Rubber Hot Mix (Type GG)" of these special provisions, if the alternative materials and methods are approved in writing by the Engineer, except no alternative to removing the full depth of the Asphalt-Rubber Hot Mix (Type GG) specified herein will be allowed for areas of flushing.

Should the Contractor fail or refuse to comply with the requirements of the warranty, the Engineer may make or cause to be made the needed repair work and provide a detailed billing to the Contractor for the work. The Contractor will be charged the cost for the work. This charge will be deducted from any payments due or to become due the Contractor.

Temporary patches and repairs made or caused to be made by the State, due to the Contractor's failure to comply with the requirements of the warranty, shall not void the warranty of the Asphalt-Rubber Hot Mix (Type GG). The Contractor shall continue to warranty the Asphalt-Rubber Hot Mix (Type GG), including areas patched or repaired by the Contractor or by the State, for the remainder of the warranty period.

Warranty will be paid for on a lump sum basis. The contract lump sum price paid for warranty shall include full compensation for providing a warranty for Asphalt-Rubber Hot Mix (Type GG) and for furnishing labor, materials, tools, equipment, and incidentals, and doing the work involved in repairing defective areas in the Asphalt-Rubber Hot Mix (Type GG), including job site inspection, placement and removal of temporary patches, cold planing, repair ofdefective areas, sealing cracks and replacement of traffic stripes, pavement markings and pavement markers obliterated by patches and repairs, as shown on the plans or described in the specifications, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer. Payment for the warranty item will be made in 10 equal payments. The first payment will be made on the third progress payment date after the warranty period begins, and subsequent payments will be made monthly thereafter. Retention payment for the remainder of the work will be made under normal procedures and within normal timeframes; the payment for Warranty work actually performed based on estimate of cost by the Engineer will be withheld until 35 days after the Warranty period has expired.

Full compensation for furnishing construction area signs required for the direction of public traffic through or around the work during the warranty period and for erecting or placing, maintaining (including covering and uncovering as needed) and, when no longer required, removing construction area signs at locations shown on the plans, during the warranty period, shall be considered as included in the cost for warranty and no separate payment will be made therefor.

13. <u>ASPHALT-RUBBER AGGREGATE MEMBRANE (ARAM)</u> <u>SURFACING AND INTERLAYER</u>

ARAM shall conform to Subsection 302-10 of the GREENBOOK, except as modified herein and Caltrans "Material Plant Quality Program" (MPQP) dated July, 2008 with Errata dated October 3, 2011.

302-10 Asphalt-Rubber Aggregate Membrane (ARAM)

Where ARAM is to be placed directly on existing pavement, pavement preparation shall include the following preparation.

Areas as directed by the Engineer shall be skin patched in conformance with Subsection 10.02 of these Special Provisions.

Cracks shall be treated as follows:

A singular crack shall be considered to be a crack on the perimeter of an otherwise uncracked asphalt pavement area exceeding 4 feet in minimum dimension. Cracks not fully interconnected in forming a complete perimeter shall be considered singular cracks, unless the maximum dimension across the partial perimeter between cracks can be measured as less than 4-feet. Such pavement area is defined by the cracks forming its perimeter. 1) Contractor shall spray all weeds in cracks with Monsanto brand Roundup, a minimum of 2 weeks prior to paving. All weeds shall be resprayed if rain occurs within 48 hours after application; 2) all holes and cracks exceeding 1.5 inches wide shall be filled with asphalt concrete approved for skin patch compacted level with the top of the existing pavement; 3) all cracks and joints 1/4 inch or greater in width shall be blown thoroughly clear with high pressure air or power broomed clean to a depth of 3/4-inch minimum immediately ahead of the crack filling operation; and 4) all joints and singular cracks between 1/4 inch and 1.5 inches in width shall be filled with Crafco Polyflex III or equal. Filler shall be within 1/8 inch below and flush with existing pavement surface and shall be thoroughly squeegeed, as necessary, to attain this result.

All crack preparation shall be performed after cold milling.

Payment for crack filling will be compensated by the lump sum bid item for crack filling. All other preparation work related to crack preparation, including weed killing and power brooming or blowing out cracks will considered included in the unit price bid for ARAM per square foot.

302-10.1 Application

The maximum viscosity of asphalt-rubber material in Table 203-11.4(A) shall be 2400 Centipoise.

The maximum ambient temperature for placement of ARAM shall be 105F.

Temperature of asphalt-rubber spread for ARAM shall be between 395F and 425F.

Asphalt-Rubber shall conform to Subsection 203-11 of GREENBOOK including modification of that section included in these Special Provisions.

Contractor shall provide a pavement temperature reading, with an infrared heat measurement instrument, when requested by the Engineer.

Item 4. of the second paragraph of Subsection 302-10.1 is hereby deleted and replaced with the following:

Material shall be applied at a rate between 2.5 and 3.0 Liters per square meter (.60 to .70 gallons per square yard) as directed by the Engineer.

The first sentence of the third paragraph of Subsection 302-10.1 is hereby deleted and replaced with the following:

The asphalt-rubber mixture may be applied to the roadway immediately after mixing and reacting at a temperature between 201 C (395 F) minimum to 218C (425 F) maximum.

Reference is made to Subsection 7-1.01F Air Pollution Control whereby Contractor shall comply with all air pollution rules and regulations.

302-10.2 Screenings The first sentence of the first paragraph of Subsection 302-10.2 is hereby deleted and replaced with the following:

Following application of asphalt-rubber, screenings shall be placed overall areas receiving asphalt-rubber. Screenings shall conform to quality requirements of Class A aggregate with the following modifications: Maximum LA Rattler value at 500 revolutions shall be 35.

Eighty-five percent of coarse aggregate shapes shall be "proportioned particles", a proportioned particle being defined as a particle having a minimum dimension greater than 1/2 the maximum dimension as measured by caliper. Percentage of proportioned particles shall be determined by California Test 205 with the words "proportioned particles" substituted for "crushed particles".

California Test 205, Section D, definition of a crushed particle is revised as follows: "A particle having 2 or more fresh mechanically fractured faces shall be considered a crushed particle".

The aggregate for screenings shall conform to following gradations:

<u>Sieve Size</u>	Percent Passing
3/4"	100
!∕₂" -	95-100
3/8"	70 -85
No. 4	0-10
No. 8	0-3
No. 200	0-1

No mineral filler or material from sand or rock dust bins shall be included in the mix.

The gradation ranges shown for screenings shall be considered the Contract Compliance Range. The Operating Range for the ½" sieve shall be the full contract compliance range. The Operating Range for all other sieves, except the 200 sieve, shall be 2 percentage points inside both limits of the Contract Compliance Range. If gradation-testing results do not meet the Operating Range requirements but meet the Contract Compliance Range, placement of ARAM may be continued for the remainder of the day. However, another day's work shall not be started until tests, or other information, indicate to the satisfaction of the Engineer that the next material to be used in the work will comply with the requirements specified for Operating Range.

Except for the No. 200 sieve, it is the intent of the Specifications that the target percentage be the central value in the Contract Compliance Range.

Any change in source of aggregate supply requires 2 weeks advance notice in writing to the Engineer, and submittals and testing in conformance with specifications for a new mix design. No single bin shall receive aggregate from more than one source. Contractor shall provide a copy of aggregate delivery tickets for aggregate delivered for use on the project.

Trucks for hauling cover material shall be tailgate discharged and shall be equipped with a device to lock onto the hitch at the rear of the aggregate spreader. Haul trucks shall also be compatible with the aggregate spreader so that the dump bed will not push down on the spreader when fully raised or have too short an apron resulting in aggregate spillage while dumping into the receiving hopper.

Screenings shall be coated completely black on the full particle surface with PG 64-16 asphalt at a central mixing plant to prevent free dust, and shall be preheated 127C (260F) to 163C (325F).

Screenings shall be placed at a rate between 32 and 40 pounds per square yard.

All rollers shall be operational at all time unless full roller coverage is complete and cessation of rolling is authorized by the Engineer. The spreader shall not stop over an area of rocks that are spread but not rolled. The spreader shall clear all areas to allow rollers to complete roller coverage without any delay.

A layer of washed concrete sand per Fine Aggregate in Section 90 spread at rate of 2 to 3 pounds per square yard shall be applied as necessary to maintain traffic at the direction of the Engineer. Excess sand spread on adjoining areas to receive ARAM shall be thoroughly swept before spreading any binder.

14. CUL-DE-SAC ASPHALT CONCRETE OVERLAY

Cul-de-sac AC paving shall be paved prior to slurry. The cul-de-sac bulbs shall be paved with ¹/₂inch Maximum Medium PG 70-10 asphalt concrete in conformance with the Cul-de-sac Bulb typical section. The rolling pattern in the Standard Specifications may be modified at Contractor's discretion to achieve the minimum level of compaction hereby specified as 95 percent of relative maximum density. Payment shall be by the unit price bid for Cul-de-sac AC Overlay including materials, tack coat, placement, compaction, traffic control and all incidentals.

15. STONE MATRIX PAVEMENT. (NOT PART OF THIS PROJECT)

15.1 Materials.

Asphalt-concrete for stone matrix pavement shall be Type A 1-1/2 inch maximum and shall conform to the provisions in Section 39, "Asphalt Concrete", of the Standard Specifications and these special provisions.

The amount of asphalt binder to be mixed with the aggregate for Type A, 1-1/2 inch asphalt concrete will be determined by the Engineer in accordance with California Test 367 using the samples of aggregate furnished by the contractor in conformance with Section 39-3.03, Proportioning, of the Standard Specifications.

The grade of asphalt binder to be mixed with aggregate for asphalt concrete shall be PG 70-10 and shall conform to the requirements specified under "Asphalt" elsewhere in these special provisions.

The aggregate for Type A 1-1/2 inch asphalt concrete shall conform to the following grading as determined by the California test 202:

Sieve Size	Limits of Proposed Grading	Operating Range	Contract Compliance
1-1/2 inch		100	100
1 inch		82-94	79-97
³ / ₄ inch		70-85	65-90
3/8 inch		45-60	40-65
<u>No. 4</u>	25-35	$x \pm 5$	x ± 8
No. 8	22-30	$x \pm 5$	x ± 8
No. 30	10-13	x ± 5	x ± 8
No. 200		1-5	1-6

Aggregate for Type A 1-1/2 inch asphalt concrete shall conform to the quality requirements in Section 39-2.02 of the Standard Specifications with the following modifications:

California Test 205 (% Crushed)

Coarse Aggregate (1-1/2 inch x ³ / ₄ inch)	
Contract compliance	90 percent minimum
Coarse aggregate (3/4 inch x #4)	
Contract compliance	90 percent minimum
Fine Aggregate (#4 x #8)	
Contract compliance	70 percent minimum
Los Angeles Rattler Loss at 500 Rev. (max)	35

Eighty-five percent of coarse aggregate shapes shall be "proportioned particles", a proportioned particle being defined as a particle having a minimum dimension greater than $\frac{1}{2}$ the maximum dimension as measured with a caliper. The percentage of proportioned particles shall be tested by California Test 205 with the words "proportioned particles" substituted for "crushed particles".

California Test 205, Section D, definition of a crushed particle hereby revised as follows: "A particle having 2 or more fresh mechanically fractured faces shall be considered a crushed particle".

Coarse aggregate crushed particle count percentage shall be computed separately and all sieve size fractions of the AS RECEIVED sample shall be included in the weighed average percentage. The weighed average percentage of crushed particles retained on the No. 4 sieve shall be 90 percent minimum and each particle shall have two or more fractured faces.

Paragraph 1 of Section 39-3.01A(1) and Section 39-3.01A(2), "Cold Storage" of the Standard Specifications, are amended to read:

Aggregate for Type A 1-1/2 inch asphalt concrete shall be separated into four or more sizes.

Paragraph 2 of Section 39-3.01B, "Hot Storage" of the Standard Specifications, is amended to read:

Aggregate for Type A 1-1/2 inch asphalt concrete shall be separated into four or more sizes.

15.2 Construction

Paragraph 12 of Section 39-6.01, "General Requirements" of the Standard Specification, is amended to read:

Longitudinal joints in the base course of Stone Matrix asphalt concrete shall be placed not less than 0.5 foot nor more than 1.0 foot of the proposed traffic lane lines. Longitudinal joints in surface course Stone Matrix asphalt concrete shall be within .5 foot of the proposed lane lines and shall be offset a minimum 2 inches from base course joints.

Stone matrix asphalt concrete shall be compacted to minimum 95% of relative maximum density.

15.03 Payment

Construction of stone matrix asphalt concrete pavement will be compensated at the bid item unit prices for Cold Milling 12-Inch Existing Pavement and Subgrade for excavation and removal, and by the bid item for Stone Matrix Asphalt Concrete for materials and installation of the pavement. All equipment, materials and labor, including temporary pavement installation and removal and traffic control and all incidentals will be considered included in the unit prices bid.

16. EXISTING LOOP DETECTORS

There are no existing loop detectors in the project area.

17. TRAFFIC STRIPING, PAVEMENT MARKINGS, AND PAVEMENT MARKERS

Traffic striping, pavement markings and pavement markers shall be replaced in kind and on the same pattern as existing in conformance with these Special Provisions. CITY to provide the striping. TRAFFIC STRIPING TO BE COMPLETED BY THE CITY OF IMPERIAL FORCES.

All details and dimensions for traffic striping and marking shall conform to the Caltrans <u>Traffic</u> <u>Manual</u> and <u>Maintenance Manual</u>.

17.1 Layout, Alignment, and Spotting. The Contractor shall furnish the necessary control points for all striping, markers and markings, and shall be responsible for the completeness and accuracy thereof to the satisfaction of the Engineer.

Contractor shall supply the Engineer with a copy of a complete inventory of striping, markers and marking prior to any cold milling or installation of any material. For each stripe, marker and marking, the inventory shall include sufficient definition about type of marker, stripe or marking, and dimensions for control points to allow for accurate reestablishment.

In no case shall any section of street be left without the proper striping for more than 48 hours, or over weekends or holidays.

17.2 Application of Paint. All paint shall be applied in two coats. The second coat shall be applied no less than 24 hours from application of the first coat and the first coat applied within 48 hours paving.

Paint for traffic striping shall be rapid dry type per Subsection 84-3.02 of the Standard Specifications. Reflective material, as specified in Subsection 84-3.02 of the Standard Specifications and these Special Provisions, shall be dropped on during application.

Paint for crosswalks, stop bars, arrows, other pavement legends and reflectorized curb markings shall be rapid dry type per Subsection 84-3.02 of the Standards Specifications, with reflective material added directly to the paint during manufacture.

17.3 CITY to provide striping.

18 UTILITY COVER ADJUSTMENTS TO GRADE

UTILITY COVER ADJUSTMENTS TO BE COMPLETED BY THE CITY OF IMPERIAL FORCES.. Manholes shall be adjusted to grade in accordance with Section 302-5.8, "Manholes," of the GREENBOOK and as supplemented herein.

18.1 <u>Reference Setting.</u>

CITY shall note and reference the locations of the manholes and water valves and vaults prior to placing pavement in order to locate and raise them following the work. Manhole, water valve and of vault locations and distance from reference points to the center of each such facility shall be marked on either a curb face or other reference point indicators (stakes) by contractor prior to be getting any paving.

18.2 Adjustment to Grade

CITY shall lower manhole and water valves within areas designated for cold milling prior to cold milling operations. Each such manhole water valve or utility box shall be lowered to a depth below the required milling depth. Frames and covers and utility boxes shall be removed to the city yard facility and a ½" thick steel plate shall be provided to cover the hole where the utility facility exists. Temporary AC shall be provided to fill any voids in the roadway surface which remain after the cover is in its final lowered position.

After completion of paving, the facility shall be raised to grade. The finish grade of raised facilities shall be ¹/₄-inch below the finish grade of the asphalt concrete pavement.

CITY shall exercise care such that rocks, dirt and debris do not enter sewer lines.

The water valves shall be raised as follows: the asphalt pavement immediately adjacent to the water valve shall be removed, the existing frame and cover removed, the existing sleeve extended or replaced with matching material to extend from the valve to the new valve frame elevation, the water valve frame and cover placed to match the respective water district's standards, the water valve and cover and adjusted to proper grade, and the pavement replaced with a minimum of two inches of asphalt concrete.

CITY shall notify the respective utility owners at least five working days in advance of the paving operations and again after completion of paving operations. Such notifications of utilities to be adjusted to grade by others shall be made in writing. Contractor shall mark locations of utilities for those locations of facilities to be adjusted to grade by others.

The Contractor shall take care to insure no intrusion of gravel or pulverized material into the manholes or valve stem areas.

18.3 Payment.

No payment for this item, since it will be completed by CITY.

Compensation for raising utility facilities to grade based on the applicable bid item for each type of facility and type of adjustment, and whether single or double. Single shall mean leaving the facility in place until paving is complete and raising the grade thereafter. Double shall mean removing the facility prior to paving and reestablishing the facility at finish grade per specifications after paving. The unit price bid shall be considered full compensation for removing the facility, and storing and replacing it as applicable, protecting the facility at all times during the procedure and as specified, and resetting the facility at finish grade, including all materials, equipment and labor and incidentals.

19. <u>COOPERATION</u>

Attention is directed to Sections 7-1.14, "Cooperation" and 8-1.10, "Utility and Non-Highway Facilities" of the Standards Specifications.

The contractor shall obtain an Encroachment Permit from the County prior to any construction activities. The contractor shall contact the Permit Specialist at the County of Imperial to verify all fees and requirements prior to bidding of project. The cost for obtaining the Permit shall be distributed among all the bid items accordingly. The County of Imperial, Department of Public Works shall be notified of all contractor's activities.

20. SANITARY ARRANGEMENTS

The Contractor shall make provisions for and maintain in a sanitary manner at the work site all necessary and sanitary conveniences for the workmen, in accordance with the rules and regulations of the State Board of Health.

21. <u>ACCESS</u>

The Contractor's attention is directed to the existing pedestrian and vehicular access ways crossing the lines of work. These access ways shall not be closed unless an alternate access way is provided. The Contractor shall assume full responsibility for providing alternate access. The compensation for the work in this item shall be considered as included in the cost of the various contract items of work and additional compensation will be made therefore.

2. INSURANCE

The Contractor's attention is directed to the amount of insurance as shown in General Provisions.

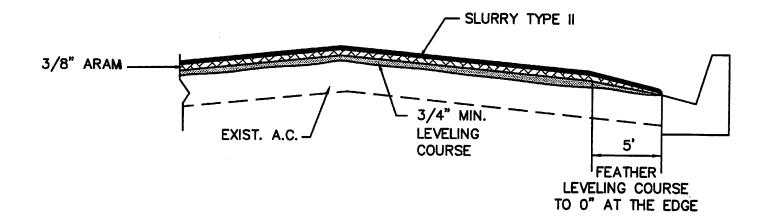
23. <u>CONSTRUCTION CONFERENCE</u>

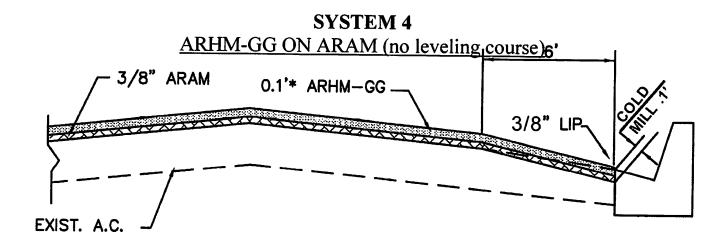
The Contractor's attention is directed to the preconstruction conference as stated in Section 6 of the General Provisions.

Appendix C Project Plans

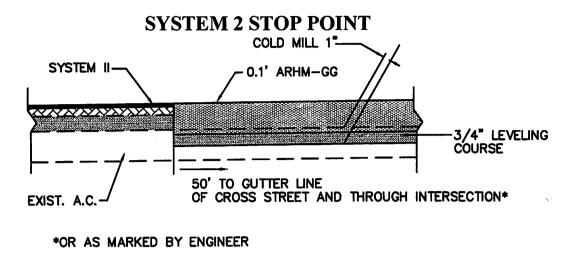
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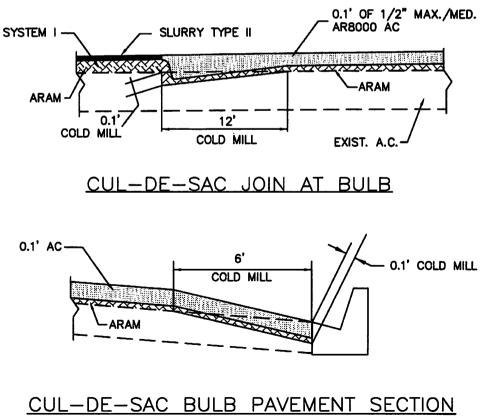


*EXCEPT AS OTHERWISE SPECIFIED



INTERSECTION JOIN SYSTEM II

CUL-DE-SAC TYPICAL DRAWINGS



BEGIN AT BCR BEFORE BULB

Big Rock Treatment

	Table	
Sieve Size	Target Value Limit	Allowable Tolerance
2"	100	-
1 1/2"	90-100	-TV±5
1"	75-90	-TV±5
3/4"	67-82	TV±5
3/8"	48-64	TV±6
No. 4	35-52	TV±7
No. 8	25-35	TV±5
No. 30	10-20	TV±4
No. 200	1.0-7.0	TV±2.0

The intersection stop points shall be paved with 1 $\frac{1}{2}$ inch HMA according to the following gradation table:

For the 1 ½ inch HMA a current Caltrans approved CEM 3513 must be submitted a minimum of 15 days prior to the start of construction for the Engineers approval.

The HMA must be designed with air voids at 5.0 ± 1.5 percent, grade of asphalt binder must be PG 70-10. No reclaimed asphalt pavement (RAP) shall be allowed in the mix.

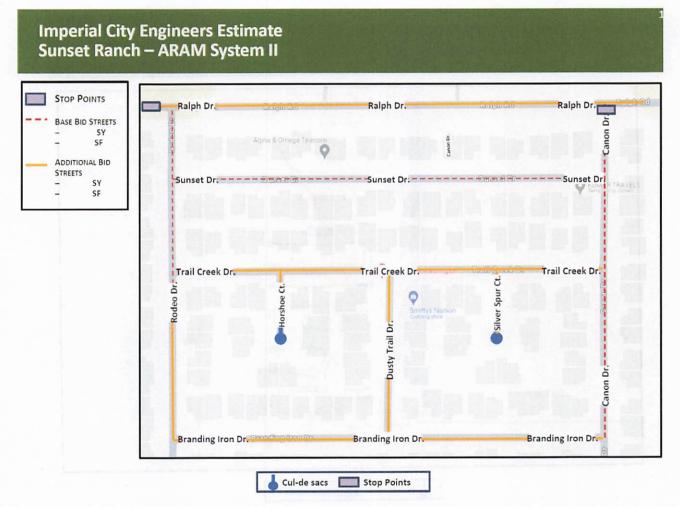
City of Imperial 2024 Street Improvement Project

ARAM SYSTEM II			
OC.	LIMITS	TOTAL SY	
1.	Lariat Ln. – Rodeo Ln. to Sage Ct.	2,340	
	$37 \times 541 = 2,224$ Sy.		
101	Knuckle $0 - 24 - 0 \ge 131 = 116$ Sy.	1.244	
2.	Sage Ct. – Lariat Ln. to Winchester	1,366	
57	$37 \ge 304 = 1,250$ Sy.		
	Knuckle $0 - 24 - 0 \ge 131 = 116$ Sy.	- 28E 2 VEL -	
3.	Winchester Ln. – Sage to Cul-de-Sac.	3,716	
	37 x 467	- 0.1ex 343	
4.	Conestoga Ln. – Canon Dr. to E/E CDS	1,590	
	37 x 241 = 991 Sy.		
	26' 122 each = 32 Sy.		
	CDS 77' $R = 517$ Sy.		
050	$37 \ge 10 = 50$ Sy.	17. Ratal K.	
5.	Mustang Ln. – Canon to Roadrunner Ln.	1,192	
21	$37 \ge 282 = 1,160$ Sy.		
	26' R 2 each = 32 Sy.		
6.	Roadrunner Ln. – Mustang to Canon Dr.	1,141	
	77' R = 517 Sy.		
3744	$37 \ge 144 = 592$ Sy.		
	26' R 2 each = 32 Sy.		
7.	Roadrunner Ln. – Canon Dr. – E/E CDS	1,721	
	$37 \times 275 = 1,131$		
	26' R 2 each = 32 Sy.		
	CDS 77' R = 517 Sy.		
	$10 \ge 37 = 41$ Sy.		
8.	Chisolm Tr. – Rodeo Dr. to Canon Dr.	3,736	
	$\overline{37 \times 425} = 1,747 \text{ Sy.}$		
00	26' R 4 each = 64 Sy.		
	Canon Dr. to Sycamore Ct.		
1.8	$37 \times 440 = 1,809$ Sy.		
	Knuckle $0 - 24 - 0 \ge 131 = 116$ Sy.		
9.	Sycamore Ct. – Chisolm Tr. To Arroyo Seco	1,358	
	$37 \times 302 = 1,242$ Sy.	1,550	
	Knuckle $0 - 24 - 0 \ge 131 = 116$ Sy.		
10.	Vaquero Tr. – Canon Dr. to W/E CDS	2,239	
10.	$\frac{vaquero}{37 \times 409} = 1,681$ Sy.	2,237	
	CDS 77' R = 517 Sy.		
16	$37 \times 10 = 41$ Sy.		
11.	Silverado Tr. – Canon Dr. to E/E CDS	2,165	
11.	$\frac{317}{37 \times 391} = 1,607$ Sy.	2,105	
	CDS 77' R = 517 Sy.		
	$CDS TT \mathbf{K} = 517 Sy.$		

LOC.	ARAM SYSTEM II LIMITS	TOTAL SY
	37 x 10 = 41 Sy.	TOTALS
12.	Silverado Tr. – Canon Dr. to Chaparral Ct. 37 x 491 = 2,019 Sy.	2,135
57	Knuckle $0 - 24 - 0 \ge 131 = 116$ Sy.	
13.	$\frac{\text{Chaparral Ct.} - \text{Silverado to Butterfield}}{37 \text{ x } 292 = 1,200 \text{ Sy.}}$ Knuckle $0 - 24 - 0 \text{ x } 131 = 116 \text{ Sy.}$	1,316
14.	$\frac{\textbf{Butterfield Tr Chaparral Ct. to Canon}}{37 \times 392 = 1,612}$	1,612
15.	$\frac{\text{Butterfield Tr.} - \text{Canon Dr. to E/E CDS}}{37 \text{ x } 389 = 1,599 \text{ Sy.}}$ CDS 77' R = 517 Sy. 37 x 10 = 41 Sy.	2,157
16.	$\frac{\text{Canon Dr.} - \text{Neckel Rd. to Ralph Dr.}}{35 \text{ x } 1,426 = 5,546 \text{ Sy.}}$ 26' R 4 each = 64 Sy. 37 x 1,295 = 5,324 Sy.	5,208
17.	$\frac{\text{Ralph Rd.} - \text{E/E Limit x R to Hwy. 86}}{37 \text{ x } 1,576 = 6,479 \text{ Sy.}}$	6,479
18.	Rodeo Dr. – Ralph Rd. to Buckskin Ranch 37 x 1,177 = 4,839	2,115
19.	<u>Sunset Dr. – Rodeo Dr. to Canon Dr.</u> 37 x 1,189 = 4,888	4,888
20.	1-1/2" BIG ROCK SEAL COAT 15 th – Hwy 86 to Imperial 38 x 215 = 907 Sy.	907
21.	ARAM SYSTEM 4 Preble Rd. – Aten Rd. to Treshill Rd 33 x 375 = 1,375 Sy. 30 x 2,160 = 7,200 Sy.	8,575
22	ARAM SYSTEM II	
22.	$\frac{\text{Myrtle Rd.} - \text{Wall Rd. to Aten Rd.}}{36 \text{ x } 1,334 = 5,336 \text{ Sy}}$	5,336
23.	De Paoli St. – Madrone Cr. To Best Ave. 57 x 260 = 1,647 Sy.	1,647
24.	Nicholas Ct. – De Paolis St. to N/ CDS $37 \times 123 = 506$ Sy. CDS 77' R = 517 Sy. $37 \times 10 = 41$ Sy.	1,064
25.	Jennifer Dr. – Madrone Cr. To Park St. 37 x 263 = 1,081 Sy.	1,081
26.	Tucker Ct. – Jennifer Dr. to N/E CDS $37 \times 205 = 843$ Sy.CDS 77' R = 517 Sy.	1,401

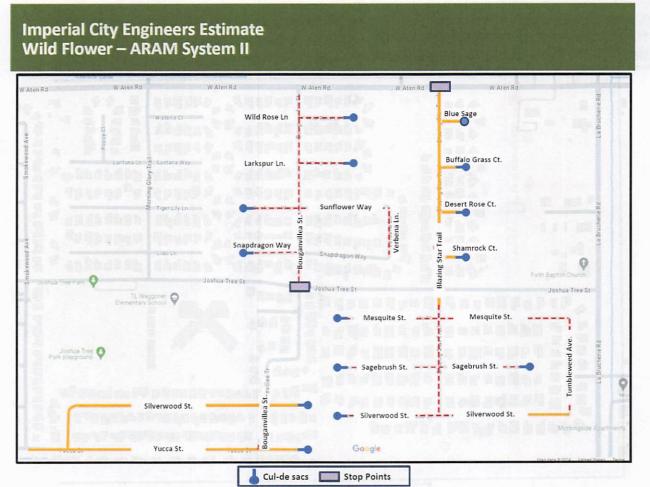
ARAM SYSTEM II				
LOC.	LIMITS	TOTAL SY		
27.	Blazing Star Tr. – Joshua Tree to Silverwood $37 \ge 806 = 3,314$ Sy.	3,378		
28.	26' R 4 each = 64 Sy. Silverwood St. – Blazing Star to Cul-de-Sac CDS 77' R = 517 Sy. $37 \times 700 = 2,800$ Sy	3,384		
29.	$37 \times 700 = 2,890 \text{ Sy.}$ $Tumbleweed Ave Silverwood to Mesquite$ $37 \times 632 = 2,598 \text{ Sy.}$ Knuckle $0 - 24 - x \ 131 = 116 \text{ Sy.}$	2,714		
30.	Mesquite St. – Tumbleweed to Blazing Star 37 x 789 = 3,244 Sy. 26' R 2 each = 32 Sy.	3,276		
31.	$\frac{\text{Mesquite St.} - \text{Blazing Star} - \text{W/E CDS}}{37 \text{ x } 647 = 2,660 \text{ Sy.}}$ CDS 77' R = 517 Sy. 37 x 10 = 41 Sy.	3,218		
32.	Sagebrush St. – Blazing Star to W/E CDS 37 x 649 = 2,688 Sy. CDS 77' R 517 Sy. 37 x 10 = 41 Sy.	3,226		
33.	Sagebrush St. – Blazing Star to E/E CDS $37 \times 564 = 2,319$ Sy. CDS 77' R =- 517 Sy. $37 \times 10 = 41$ Sy.	2,877		
34.	Bouganvillea St. – Aten Rd. to Joshua Tree $37 \times 1,231 = 5,061$ Sy. 26' R 2 each = 32 Sy.	5,093		
35.	$\frac{\text{Snapdragon Way - Bouganvillea St.to W/E}{\text{CDS}}{37 \text{ x } 298 = 1,225 \text{ Sy.}}$ CDS 77' R = 517 Sy. 37 x 10 = 41 Sy.	1,783		
36.	Verbena Ln. – Snapdragon to Sunflower $37 \times 331 = 1,361$ Sy. Knuckle $0 - 40 - 0 \ge 180 = 267$ Sy.	1,628		
37.	Sunflower Way – Verbena Ln. to Bouganvillea 37 x 524 = 2,154 Sy. 26' R 2 each = 32 Sy.	2,186		
38.	$\frac{\text{Sunflower Way - Bouganvillea St. to W/E CDS}}{37 \times 303 = 1,246 \text{ Sy.}}$ 26' R 2 each = 32 Sy. CDS 77' R = 517 Sy.	1,836		

ARAM SYSTEM II		
LOC.	LIMITS	TOTAL SY
121	$37 \ge 10 = 41$ Sy.	
39.	Larkspur Ln - Bouganvillea St. to E/E CDS	1,894
	37 x 304 = 1,250 Sy.	-,
	CDS 77' $R = 571$ Sy.	
14	$37 \ge 10 = 41$ Sy.	
2.23	26' R 2 each = 32 Sy.	
40.	Wild Rose Lane - Bouganvillea St. to E/E CDS	1,783
	$37 \ge 298 = 1,225 $ Sy.	1,100
	CDS 77' $R = 517$ Sy.	
1.00	$37 \ge 10 = 41$ Sy.	
41.	La Brucherie Rd. – W. Aten Rd. to Industry	3,257
	Way	
	$28 \ge 1,034 = 3,217 \text{ Sy.}$	
1000	$37 \ge 10 = 41$ Sy.	
	TOTAL ARAM SY	109,111
	TOTAL TYPE II SLURRY SY (ALL EXCEPT	100,536
Constant.	SYSTEM IV)	













Imperial City Engineers Estimate Victoria Ranch – ARAM System II

