INVITATION FOR BIDS

City of Santa Rosa

FOR CONSTRUCTING

ROSELAND PAVEMENT MAINTENANCE-2021

CONTRACT NUMBER

C02345

ISSUED BY

CAPITAL PROJECTS ENGINEERING DIVISION

CITY OF SANTA ROSA, CALIFORNIA

2021

Last Updated: March 1, 2016

A T T E N T I O N
Prebid Conference
See Page 1

City of Santa Rosa

STATE OF CALIFORNIA

INVITATION FOR BIDS

CONTAINING:

NOTICE TO BIDDERS

SPECIAL PROVISIONS

BID FORMS

CONTRACT

FOR

ROSELAND PAVEMENT MAINTENANCE-2021

Contract No. C02345

ROSELAND PAVEMENT MAINTENANCE-2021

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CITY OF SANTA ROSA
STATE OF CALIFORNIA

NOTICE TO BIDDERS

➢	For technical questions regarding this project, contact Grant Bailey at (707) 543-4508.
➢	For direct access to plans, specifications and planholders' lists, go to www.srcity.org/bids and click on Bid/Proposal Opportunities or call (707) 543-3800.
➢	For direct access to bid results, go to www.srcity.org/bids. Under Link to Capital Projects, click on Capital Projects Contracts or call (707) 543-3835.

- IMPORTANT –
REVISED BIDDING PROCEDURES DURING SHELTER IN PLACE ORDER

Pursuant to Order No. C19-09, the Sonoma County Public Health Officer has extended the Shelter in Place Order, which will continue until it is extended, rescinded, superseded, or amended in writing by the Health Officer or the State Health Officer. City facilities are closed to the public and construction meetings will be held by teleconference calls.

All bids shall be submitted and opened according to the following procedure:

Bid Acceptance Deadline

Sealed bids will be accepted at the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California 95401 until 2:00 p.m., May 4, 2021, for Roseland Pavement Maintenance-2021, Contract No. C02345. (Engineer's Range: $700,000.00 to $800,000.00.)

Bids tendered after this deadline will not be accepted. The official time clock for accepting bids will be an electric date and time stamping clock, located in the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California. In order to be accepted, bids must be received prior to 2:00 p.m. Therefore, a bid stamped in at 1:59 p.m. will be accepted, but one delivered at or after 2:00 p.m. is late and will not be accepted.

A. If you choose to mail your Bid Proposal via any of the overnight/express services, such as FedEx, UPS and USPS, the delivery MUST be a timed delivery. The delivery service MUST deliver the bid prior to the deadline time posted above. The outside envelope MUST be clearly marked as follows: [SEALED BID FOR: C02345 ROSELAND PAVEMENT MAINTENANCE-2021].

B. If you choose to deliver your Bid Proposal in person, the TIME TO DELIVER BIDS is within the one hour WINDOW FOR DELIVERY prior to deadline posted above. No bids will be accepted outside of this time window.

Bid Opening Teleconference Call

Prospective bidders, subcontractors, and materials suppliers are invited to attend the Bid opening teleconference call scheduled to be held at 2:00 p.m., May 4, 2021. The teleconference can be accessed by dialing 1 (707) 543-4700, participant code 904-4325#.

Project Description/Scope of Work

This project will consist of performing preventive maintenance on newly-annexed streets within the Roseland area of Santa Rosa. Maintenance activities will be performed on residential, collector and arterial streets and will include crack sealing, localized asphalt repairs, and pavement resurfacing. As part of the Roseland Annexation agreement, the County would provide $6.2M over a 10-year period to the City to make roadway improvements. This project is the second phase of pavement maintenance in Roseland as a result of the funding provided by Sonoma County.

Pre-Bid Meeting Teleconference Call

Prospective bidders, subcontractors, and materials suppliers are invited to attend a pre-bid meeting teleconference call scheduled to be held at 10:00 a.m., April 22, 2021. The teleconference can be accessed by dialing 1 (707) 543-4700, participant code 876-7323#.

Subcontractor Information; Department of Industrial Relations Registration

Bidders shall provide the names, business addresses and license numbers of all subcontractors listed on bidder's List of Subcontractors. No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

CITY OF SANTA ROSA
C02345 ROSELAND PAVEMENT MAINTENANCE-2021
ESTIMATED QUANTITIES

Item No.	Description	Quantity	Units
1	TRAFFIC CONTROL	1	LS
2	WATER POLLUTION CONTROL	1	LS
3	PREPARATION FOR HIGH VOLUME TRAFFIC SLURRY SEAL	907,675	SF
4	HIGH VOLUME TRAFFIC SLURRY SEAL	980	TON
5	ASPHALT CONCRETE SURFACE REPAIR	660	TON
6	THERMOPLASTIC ARROWS, SYMBOLS, WORDS	3,815	SF
7	THERMOPLASTIC GREEN BIKE LANE	432	SF
8	12-INCH THERMOPLASTIC	3,730	LF
9	8-INCH THERMOPLASTIC	1,220	LF
10	6-INCH SPRAYED THERMOPLASTIC	8,345	LF
11	4-INCH SPRAYED THERMOPLASTIC	4,295	LF
12	THERMOPLASTIC DOUBLE YELLOW CENTERLINE	6,120	LF
13	PAVEMENT MARKERS, REFLECTIVE	875	EA
14	PAVEMENT MARKERS, NON-REFLECTIVE	4,135	EA
15	TREE TRIMMING AND PRUNING	1	LS

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the City of Santa Rosa does not expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, as may be deemed necessary or expedient by the Engineer.

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the Director of the DIR pursuant to Labor Code sections 1770 *et seq*.

Contractor shall be responsible for compliance with the Immigration Reform Control Act of 1986.

If the project requires the employment of workers in any apprenticeable craft or trade, once awarded, Contractor and subcontractors must apply to the Joint Apprenticeship Council unless already covered by local apprentice standards (see Labor Code section 1777.5).

All bids are to be compared on the basis of the Engineer's estimate of the quantities of work to be performed. No bid will be awarded to a contractor who is not licensed in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code. Contractor must hold a Class A, C-12 or C-32 license for this project.

Project plans, bid and contract forms for C02345 Roseland Pavement Maintenance-2021 may be obtained through PlanetBids at www.srcity.org/bids. These documents can no longer be obtained at the Transportation and Public Works Department.

No bid will be accepted unless it is made on the contract bid forms furnished by the Transportation and Public Works Department through PlanetBids. The original of the completed bid forms bearing original signatures must be submitted. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at www.srcity.org/bids, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

The successful bidder will be required to hold a current City of Santa Rosa business tax certificate issued pursuant to Chapter 6.04 of the Santa Rosa City Code before commencing work on this project. For information regarding the business tax, contact Revenue and Collections at (707) 543-3170.

For any moneys earned by Contractor and withheld by the City of Santa Rosa to ensure the performance of the Contract, Contractor may, at its request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Section 22300 of the California Public Contract Code.

The City of Santa Rosa reserves the right to reject any or all bids and the right to waive minor irregularities or informalities in any bid or bonds.

Mar 30, 2021

GRANT BAILEY, P.E.
Supervising Engineer

Date

SPECIAL PROVISIONS

General Specifications

CITY OF SANTA ROSA, CALIFORNIA

ROSELAND PAVEMENT MAINTENANCE-2021

1 GENERAL

The work described herein shall be done in accordance with the "Contract Documents," which are the:

1. Special Provisions
2. City of Santa Rosa Design and Construction Standards (City Standards)
3. City of Santa Rosa Construction Specifications for Public improvements (City Specifications)
4. State of California Department of Transportation Standard Specifications 2010 (Standard Specifications), and
5. State of California Department of Transportation Standard Plans 2010 (Standard Plans).

In the event of a conflict in any of these documents, the order of precedence shall be determined by Section 5-1.02 of these Special Provisions.

Whenever the Standard Specifications use the terms State of California, Department of Transportation, Director, Engineer, or Laboratory, the following terms shall be substituted therefor, and any reference to any of the foregoing terms shall be understood and interpreted to mean and refer to such substituted terms as follows:

For State of California - the City of Santa Rosa;

For Department - the City of Santa Rosa Department of Transportation and Public Works or the City of Santa Rosa Water Department;

For Director - the City Engineer of the City of Santa Rosa;

For Engineer - the City Engineer of the City of Santa Rosa or the City Engineer's authorized agents;

For Laboratory – Materials Engineering of the City of Santa Rosa Transportation and Public Works Department, or such other laboratory as may be authorized by the City.

Unless otherwise provided, whenever in these Special Provisions attention is directed to specific provisions in the Standard Specifications, such direction shall not be interpreted as excluding other applicable provisions of the Standard Specifications.

Unless otherwise provided, when sections and subsections of the Standard Specifications are used in these Special Provisions, such use is not exclusive and shall not be interpreted as excluding other applicable provisions of said sections and subsections but is only intended to add to or modify such sections or subsections.

Unless otherwise provided, full compensation for compliance with these Special Provisions is included in the contract price and no additional allowance will be made to Contractor therefor.
The Standard Specifications are hereby modified to delete any reference or incorporation of provisions providing for or requiring arbitration of any and all claims and disputes arising under this contract.

2 BIDDING

2-1.06 Bid Documents: Prospective bidders will be furnished with an Invitation for Bids which will state the location and description of the contemplated public works project and will show the approximate estimate of the various quantities and kinds of work to be performed and materials to be furnished with a schedule of items for which unit prices are requested.

2-1.07 Approximate Estimate: The quantities given in the Contract Documents are approximate only, being given as a basis for the comparison of bids, and the City does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or part of the work or to omit parts of the work, as may be deemed necessary or advisable by the Engineer.

2-1.31 Examination of Project Plans, Specifications, City Standards, Invitation for Bids and Work Site: Prior to submitting a bid, the bidder shall carefully examine the Project Plans, Invitation for Bids, City Standards and the proposed work site. If any person contemplating submitting a bid for this public works project is in doubt as to the meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the Contract Documents, he or she may submit a written request for interpretation or correction to the Engineer. The written request must be received by the Engineer a minimum of **96** hours prior to bid opening. Any interpretation or correction of the Contract Documents prior to bid opening will be made only by written addendum issued by the City. A copy of such addendum will be mailed or faxed to each Planholder. The City will not be bound by any other explanations or interpretations of the Contract Documents.

2-1.33 Bid Document Completion: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

2-1.33A Bid Forms: All bids shall be made on bid forms obtained from PlanetBids at www.srcity.org/bids. The bidder shall submit its bid on the original bid forms furnished by the City. Bids submitted on forms other than the forms furnished to the bidder by the City will not be considered.

The bid forms to be submitted at the time of and with the bid are:

1. Unit Price Schedule
2. List of Subcontractors
3. List of Previous Similar Jobs
4. Noncollusion Declaration
5. Bid Guaranty Information and Bidder's Information and Signature
6. Bid Guaranty (Bid Bond or alternate security)

All bids shall give the proposed prices and must bear the original signature of the bidder. Bidders shall fill in all blanks on the bid forms where required. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at www.srcity.org/bids, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

2-1.33B Registration with DIR: No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

2-1.33C Subcontractors: The Subletting and Subcontracting Fair Practices Act, Public Contract Code sections 4100-4113, inclusive (the "Act") shall apply to all subcontracts in excess of one-half of one percent of the total amount of a bid. The Act requires subcontractors, if used for such work, to be listed in the contractor's bid and prohibits the substitution of subcontractors, except as authorized by the Act. Each bidder shall, with respect to the work of any subcontractor in excess of one-half of one percent of the total amount of the bid, include as part of the bid on the bid form provided:

1. The name, business address and DIR registration number of each subcontractor who will perform work or labor or render services to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Project Plans or other Contract Documents in an amount in excess of one-half of one percent of the Contractor's total bid; and

2. The portion of the work that will be done by each subcontractor. Only one subcontractor shall be listed for each portion.

The purchase of sand, gravel, crushed rock, batched concrete, aggregate, ready-mixed concrete, and/or any other materials produced and furnished by established and recognized commercial plants, together with the delivery of such materials to the work site by the source of the materials or by recognized commercial hauling companies, is not considered as subcontracting under this section.

2-1.33E Rejection of Bids Containing Alterations, Erasures or Irregularities: Bids may be rejected if they show any alterations of forms, additions not called for, conditional bids, incomplete bids, erasures or irregularities of any kind.

2-1.34 Bid Guaranty: All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's or certified check, or by a bidder's bond made payable to the City of Santa Rosa and executed as surety by a corporate surety authorized and admitted to transact a surety business in the State of California in an amount equal to ten percent of the amount of the bid. No bid shall be considered unless such cash, cashiers or certified check, or bidder's bond is enclosed with the bid. Any bidder's bond shall contain provisions for forfeiture consistent with California Public Contract Code section 20172.

2-1.40 Withdrawal of Bid: A bid may be withdrawn prior to, but not after, the hour fixed in the public notice for the opening of bids, provided that a written request to withdraw the bid, executed by the bidder or the bidder's authorized representative, is filed with the Engineer before this deadline. The withdrawal of a bid shall not prejudice the right of a bidder to submit a new bid.

2-1.43 Public Opening of Bids: Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

2-1.46 Disqualification of Bidders: Serial bids from the same bidder will not be accepted. This section shall not be interpreted to mean that the same contractor may not be the contractor in one bid and listed as a subcontractor in another bid, provided that no collusion exists.

2-1.48 Competency of Bidders: No bid will be accepted from or contract awarded to a contractor that is not licensed in accordance with the law, that does not hold a license qualifying it to perform work under this contract, to whom a bid form has not been issued by the Engineer, or that has not successfully completed projects of similar character, scope and cost to the proposed project. Bidders will be required to provide a list of previous similar jobs with their bids.

3 CONTRACT AWARD AND EXECUTION

3-1.04 Contract Award: The City reserves the right to reject any or all bids. Bids are required for the entire work described herein. All bids will be compared with the Engineer's estimate of the quantities of work to be completed. Contract award, if any, will be made to the lowest responsible bidder within sixty days from the date bids are opened.

3-1.05 Contract Bonds: Within ten days after receipt of the Notice of Award, the successful bidder shall provide the following bonds to the City:

a. Performance Bond: A performance bond to guarantee the faithful performance of the terms and conditions of the Contract by Contractor, which shall be executed in a sum of not less than one-half of the Contract price;

b. Labor and Materials Bond: A labor and materials bond (payment bond) in accordance with Part 6 of Division 4, sections 8000 *et seq*. of the California Civil Code, to guarantee against any and all claims of subcontractors or other third parties furnishing labor, materials, or supplies for the Contract, which shall be executed in a sum of 100% of the Contract price; and

c. Material Guaranty Bond: A material guaranty bond (warranty bond) to serve as surety for the guarantee requirements outlined in Section 6-3.01B, which shall be executed in a sum of not less than one-half of the Contract price.

The bond(s) shall be provided in a form acceptable to the City and issued by a corporate surety in good financial standing and authorized and admitted to transact a surety business in the state of California for the purposes and in the amount(s) stated above.

Whenever the financial or legal status of any surety on any such bond(s) is/are unacceptable to the City, it may make a demand to Contractor for further bond(s) or additional surety, not exceeding the sums originally required. Thereafter, no payment shall be made upon the Contract to Contractor or any assignees of Contractor until such bond(s) or additional surety has/have been provided to the City.

3-1.07 Indemnification and Insurance: Indemnification: Contractor shall defend, hold harmless and indemnify City, its officers, agents and employees, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death; damage to personal, real or intellectual property or the environment; contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with the performance of or the failure to perform the Contract by Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not such Liabilities are caused in part by a party indemnified hereunder, or such Liabilities are litigated, settled or reduced to judgment; provided, that the foregoing indemnity does not apply to liability for any damage or expense for death or bodily injury to persons or damage to property to the extent arising from (i) the sole negligence, or willful misconduct of, or defects in design furnished by City, its agents, servants, or independent contractors who are directly responsible to City (excluding Contractor), or (ii) the active negligence of City.

The existence of any of the insurance policies or coverages described in this Contract shall not affect or limit any of City's rights hereunder, nor shall the limits of such insurance limit Contractor's liability to the City hereunder. The provisions of this section shall survive any expiration or termination of the Contract.

Insurance: Contractor shall maintain in full force and effect all of the insurance coverage described in and in accordance with the insurance requirements set forth below. Maintenance of such insurance coverage during the entire performance of the Contract is a material element of the Contract. Failure by Contractor to (i) maintain or renew coverage, (ii) provide notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, if necessary, may be deemed a material breach of the Contract by Contractor, whereas the City shall be entitled to all rights and remedies at law or in equity. Notwithstanding the foregoing, any failure by Contractor to maintain required insurance coverage shall not excuse or alleviate Contractor from any of its other duties or obligations under the Contract. In the event Contractor retains or utilizes any subcontractors or sub-consultants in performance of the work, Contractor shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverage requirements herein set forth below.

Insurance Requirements:

A. Insurance Policies: Contractor shall maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with an AM Best rating of no less than A-:VI or a rating otherwise acceptable to the City.

	Insurance	Minimum Coverage Limits	Additional Coverage Requirements
1.	Commercial general liability	$5 million per occurrence $5 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include products liability and completed operations coverage which shall continue for a period of three years after acceptance of the work by the City. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. Coverage may be met by a combination of primary and umbrella or excess insurance, but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Completed Operations Coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 37 04 13. See endorsements below for other Additional Insured Requirements. Coverage shall not exclude subsidence.
2.	Business auto coverage	$3 million	Coverage at least as broad as ISO Form Number CA 00 01 covering any auto (Code 1). Insurance shall cover owned, non-owned and hired autos.

3.	Workers' compensation and Employer's Liability	$1 million	As required by the State of California, with Statutory Limits and Employer's Liability Insurance with limit of no less than $1 million per accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by Contractor, its employees, agents and subcontractors.
4.	Contractor's pollution legal liability and/or asbestos legal liability and/or errors and omission (if the City determines, in its sole discretion, that the project involves environmental hazards)	$1 million per occurrence or claim $2 million aggregate	If the work involves lead-based paint or asbestos identification/remediation, the pollution liability policy must not contain lead-based paint or asbestos exclusions. If the work involves mold identification, the pollution liability policy must not contain a mold exclusion and a definition of "Pollution" in said policy shall include microbial matter including mold.
5.	Course of construction/ builders' risk	Amount of completed value of project without co-insurance provisions	Required for construction projects over $3 million. The City shall be named as loss payee.

B. Endorsements:

1. All policies shall provide or be endorsed to provide that coverage shall not be canceled by either party, except after prior written notice has been provided to the City in accordance with the policy provisions.
2. Liability policies shall provide or be endorsed to provide the following:
   a. For any claims related to this Contract, Contractor's insurance coverage shall be primary, and any insurance or self-insurance maintained by City shall be in excess of Contractor's insurance and shall not contribute with it. Endorsements at least as broad as 20 01 04 13 or evidence of policy language will be required in non-ISO CGL policies.
   b. **The City of Santa Rosa, its officers, agents and employees are to be covered as additional insureds on the CGL policy.** Additional Insured Endorsements at least as broad as 20 10 04 13 or 20 38 04 13 are required.

C. Verification of Coverage and Certificates of Insurance: Contractor shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Contract. The City reserves the right to require complete copies of all required policies and endorsements during the duration of the Contract and for a period of three years following City's acceptance of the work.

D. Other Insurance Provisions:

1. No policy required by this Contract shall prohibit Contractor from waiving any right of recovery prior to loss. Contractor hereby waives such right with regard to the indemnitees.
2. All insurance coverage amounts provided by Contractor and available or applicable to this Contract are intended to apply to the full extent of the policies. Nothing contained in this Contract limits the application of such insurance coverage. Coverage for an additional insured shall NOT be limited to the insured's vicarious liability. Defense costs must be paid in addition to coverage amounts.
3. Self-insured retentions above $10,000 must be approved by the City. At the City's option, Contractor may be required to provide financial guarantees.
4. City reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

3-1.18 Contract Execution: The fully executed Contract, original bonds and insurance certificates and endorsements required under the Contract shall be delivered to the City within ten calendar days of Contractor's receipt of the Notice of Award.

The Engineer will supply Contractor with up to ten sets of the Invitation for Bids and Project Plans. At least one complete set of the Invitation for Bids and Project Plans shall be kept at the construction site in good condition and made available to the Engineer at all times. Additional copies of the Invitation for Bids and Project Plans will be provided by the Engineer at Contractor's cost.

3-1.20 Failure to Execute Contract: Contractor's failure to deliver to the City the fully executed Contract within ten calendar days of Contractor's receipt of the Notice of Award shall be cause for the cancellation of the award and the forfeiture of the bid guaranty to the City. If the successful bidder refuses or fails to execute the Contract, the City may award the Contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the Contract, the City may award the Contract to the third lowest responsible bidder. The refusal or failure by the second or third lowest responsible bidder to deliver to the City the fully executed Contract within ten calendar days of receipt of the Notice of Award to the respective bidder shall likewise be cause for the cancellation of the award and the forfeiture of the bid guaranty of the respective bidder. In its discretion, the City may then re-advertise the project or construct it by day labor.

3-1.21 Return of Bid Guarantees: Within ten days after the opening of bids, the City will return the bid guarantees to all bidders except the three lowest responsible bidders. The bid guarantees of the three lowest responsible bidders will be retained until the Contract has been fully executed. In the event all bids are rejected, all bid guarantees will be returned to the respective bidders.

3-1.22 Subcontractors: The successful bidder shall furnish a list of all subcontractors as required under Sections 2-1.33C. The list shall include the name, business address, DIR registration number and the state contractor's license number of each subcontractor on the list and the names of the responsible managing employees whose names appear on the subcontractors' licenses.

4 SCOPE OF WORK

4-1.05 Changes and Extra Work: All changes to the Contract shall be made by written change order only.

All extra work shall be recorded by Contractor on a daily report signed by both the City and Contractor. The "daily reports" shall thereafter be considered the true record of extra work performed. A copy of the daily reports will be furnished to Contractor. Contractor is directed to Section 9-1.04 of this Invitation for Bids.

4-1.05C Compensation for Altered Quantities: Payment and compensation for altered quantities shall conform to the provisions of Section 9-1.06 of the Standard Specifications, except as modified herein.

5 CONTROL OF WORK

5-1.02 Contractor's Copies of Contract Documents: In the event of a conflict in any of the Contract Documents, the order of precedence from highest to lowest shall be as follows:

1. Special Provisions
2. City Standards
3. City Specifications
4. Standard Specifications
5. Standard Plans

5-1.05 Order of Work: The work as shown on the Project Plans and as specified in the Invitation for Bids shall be constructed in a sequence that is satisfactory to and approved by the Engineer.

Contractor shall prepare a work schedule per Section 8-1.02 of the Standard Specifications.

With the exception of trenching, all existing street, street light base, curb and gutter, storm drain, water line, and sewer line work shall be completed before any existing street paving is removed.

Full compensation for the conformance to the requirements of this section is included in the Contract price and no additional allowance will be made to Contractor for this work.

5-1.17 Character of Workers: Contractor is directed to Section 5-1.17 of the Standard Specifications which states:

> "If any subcontractor or person employed by the Contractor shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the request of the Engineer, and such person shall not again be employed on the work."

No additional compensation shall be granted to Contractor in the event City exercises any part of its rights under this section and any and all costs related to such exercise shall be borne by Contractor.

5-1.20 Cooperation with Other Entities: Attention is directed to Section 5-1.20 of the Standard Specifications.

Other construction including but not limited to utility, power, and pipe line relocation, may be in progress by other forces within and adjacent to the project area at the same time work is being performed under this Contract by Contractor.

Contractor shall cooperate with the forces performing other work, to the end that such forces may conduct their operations with as little inconvenience and delay as possible. Contractor shall grant such forces access to the project area as is reasonable and necessary to transport materials and equipment to the site of operations by the other forces.

5-1.20B(4)(a) Offsite Staging Areas and Construction Yards: Attention is directed to Santa Rosa City Code section 20-52.040, Temporary Use Permit.

A Temporary Use Permit shall be obtained for any offsite construction yard on private property to be used for any of the following:

a. Stockpiling of equipment and/or materials;
b. Staging of construction;
c. Placement of work trailers or mobile offices;

d. Storage of trench spoils; or
e. Other construction related activities not specifically enumerated above.

5-1.26 Lines and Grades: Contractor shall carefully preserve all bench marks, grade stakes, and all other survey markers. In the case of willful or careless destruction, Contractor shall bear the cost of replacing the markers.

Contractor shall contact the Engineer directly for coordination of survey staking. Written staking requests must be submitted at least two working days in advance of the date and time stakes are needed.

5-1.27B Examination and Audit: Pursuant to California Government Code section 8546.7, any contract with the City involving expenditures in excess of $10,000 shall be subject to the examination and audit of the California State Auditor for a period of three years after final payment is made to Contractor by City under this Contract. Any such examination and audit will be confined to those matters connected with the performance of this Contract.

5-1.30A Inspection: Contractor shall bear all costs associated with the re-inspection of any defective, rejected or unauthorized work as determined by the Engineer in Engineer's sole discretion. Such costs of re-inspection, including any costs incurred by the City for additional staff time or fees for third-party consultant inspectors, will be deducted from one or more progress payments hereunder.

5-1.36A Property and Facility Preservation: Attention is directed to Section 5-1.36 of the Standard Specifications.

At Contractor's sole expense, all fences, gates, landscaping, drainage ditches, sidewalks, irrigation systems, and any other improvements that are damaged, removed or destroyed because of Contractor's operations, shall be replaced in accordance with City Standards at a minimum and restored to the same or better condition. Concrete surface treatment and score marks shall match adjacent existing concrete improvements.

5-1.36E Obstructions: Attention is directed to Section 5-1.36 of the Standard Specifications and to the possible existence of underground gas mains, high voltage lines, telephone ducts, storm drains and water and sewers systems, the locations of which are not shown on the Project Plans. The determination of the location of these facilities and the cost of repair or replacement in the event of damage to such facilities are the sole responsibility of Contractor.

Should Contractor alter any public utility or private improvements to facilitate its operations or for its sole benefit, which alteration would not be otherwise required, Contractor shall make whatever arrangements are necessary with the owner or controlling authorities and shall bear all expenses in connection therewith. Any damages to any public utility or private improvement caused by Contractor shall be repaired by Contractor at its sole expense and to the full satisfaction of the Engineer or the controlling authority.

Any subsurface information and data furnished under any part of this Contract are not intended as a representation or warranty but are furnished for information only. It is expressly understood that the City will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn therefrom by Contractor. The information is made available so that Contractor may have ready access to the same information available to the City and is not part of this Contract.

PRIOR TO STARTING ANY EXCAVATION, CONTRACTOR SHALL (AT LEAST TWO WORKING DAYS IN ADVANCE) CALL UNDERGROUND SERVICE ALERT (USA) toll free at (800) 227-2600 and provide USA with all necessary data relative to the proposed excavation. USA will accept calls and process information to participating agencies who have underground facilities in the area

between the hours of 7:30 a.m. and 5:00 p.m. daily, except Saturdays, Sundays, and holidays. Between the hours of 5:00 p.m. and 7:30 a.m., calls will be recorded and then processed after 7:30 a.m. For emergency situations, after hours, and on Saturdays, Sundays and holidays, Contractor shall contact the owner of the affected facility.

Contractor shall coordinate all work with the appropriate City field personnel. When City work forces are required at the job site to perform Contract items of work, Contractor shall give a minimum of two working days advanced notification to the appropriate field office:

Water Division:	(707) 543-4200
Sewer Division:	(707) 543-4200
Street Division:	(707) 543-3880
Survey Division:	(707) 543-3834

5-1.43 Potential Claims and Dispute Resolution: "Claim" means a separate demand by Contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following: (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the City under the Contract; (B) Payment by the City of money or damages arising from work done by, or on behalf of, Contractor pursuant to the Contract and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled; or (C) Payment of an amount that is disputed by the City.

Upon receipt of a Claim, the City shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed, provided, the parties may extend the 45 day time period by mutual agreement.

If the City needs approval from the City Council to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the Claim, and the Council does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim, the City shall have up to three days following the next duly publicly noticed meeting of the City Council after the 45-day period, or extension expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. If the City fails to issue a written statement, the Claim shall be deemed rejected in its entirety.

If a Contractor disputes the City's written response, or if the City fails to respond to a Claim within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the City shall conduct a meet and confer conference within 30 days for settlement of the dispute. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the Claim, as identified by Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

6 CONTROL OF MATERIALS

6-2.01 Source of Supply and Quality of Materials: All materials required to complete the work under the Contract shall be furnished by Contractor and shall be free of hazardous substances.

6-3.01 General: Statistical means will not be used by the City for determination of Standard Specification compliance. Whenever both operating range test results and Contract compliance requirements are specified in these special provisions, the operating range requirements shall apply to the individual test results.

6-3.01A Material Submittals: Upon award of the Contract by City, Contractor shall submit to the Engineer a list of all materials proposed to be used on this project and any supporting documentation and/or samples required and source of supply.

For material listed on the "Engineer's List of Approved Items" which is located in the Sewer and Water sections only of the City Standards, the Engineer shall be provided with the name of the manufacturer and model/part number for all material proposed for this project, unless that item has been replaced as shown on the Project Plans or in the Invitation for Bids.

For all other materials used on this project, regardless of the type of work, Contractor shall provide to the Engineer the name of the manufacturer and model/part number along with supporting documentation and/or samples that will allow the Engineer to determine the material's acceptability.

The Engineer reserves the right to reject any proposed material, whether on the City's "Engineer's List of Approved Items" or not. If the City obtains information indicating that a listed item is not performing satisfactorily or is found to be defective, that item will be rejected and Contractor shall submit a replacement for review at no additional cost to the City.

6-3.01B Material Guarantee: Before any contract is awarded, the bidder may be required to furnish samples of materials and detailed descriptions of equipment to be used in the construction of the project. The materials samples may be subjected to the tests provided for in the Standard Specifications or in this Invitation for Bids to determine their quality and fitness for the project. The successful bidder shall unconditionally guarantee project materials and workmanship for a period of one year from the date of recording of the Notice of Completion. The guarantee shall cover 100% of all costs of repairs within the one year period, including all costs of labor, materials, equipment, and incidentals. Except as may be otherwise provided in Section 3-1.05, the successful bidder shall provide a surety bond executed by a corporate surety authorized and admitted to transact a surety business in the state of California in the minimum amount of one-half of the Contract price to cover this guarantee.

6-3.05 Quality Assurance: California Test 216 (Relative Compaction) testing will be modified as follows: A mechanical compactor (Ploog Engineering Co. Model M 100 or equivalent) with 10-pound hammer and split compaction molds shall be used in lieu of the specified manual compaction equipment.

California Test 231 (Nuclear Gage Determination of In-Place Density) will be modified as follows: In-place density and relative compaction may be determined on the basis of individual test sites in lieu of the area concept, at the discretion of the Engineer.

6-4 Water Utility

6-4.01A Construction Water: All water required for the performance of the work shall be provided by Contractor. Prior to obtaining water from the City's water system, Contractor shall obtain a Water

Use Permit from the City of Santa Rosa Water Department and rent a hydrant or bridge meter. Contractor is responsible for the cost of all water and the cost of all deposits, permits and fees.

Contractor is prohibited from operating gate valves or fire hydrants on the City system.

The acquisition of water from the City's water system through un-metered hydrants or other facilities is a violation of City ordinance and State law. The use of water from sources other than the City's water system must be approved by the Engineer in advance of the use.

Citations and fines will be levied for violation of these and other utility regulations and deductions will be made from payments consistent with Section 7-1.02A(1) of the Standard Specifications.

6-4.01B Water Utility Notification: Contractors or parties requiring work of any kind by the City of Santa Rosa Water Department forces shall request such services a minimum of 48 hours in advance of the time such services are desired. Work requests which will involve the City of Santa Rosa Water Department forces for more than eight hours or an extensive number of City parts shall be requested a minimum of seven calendar days in advance.

If it is necessary to terminate or disrupt utility service to any customer, Contractor shall make the request for such work by City forces an additional 72 hours (three additional working days for a total of five working days advance notice) in advance of the time such services are desired to allow affected customers a minimum of 72 hours' notice. Contractors who fail to keep field appointments will be billed for scheduled City of Santa Rosa Water Department crew standby time which was used and the Contractor shall bear the costs incurred by the City of Santa Rosa's Water Department for re-notification of customers.

City of Santa Rosa Water Department crews work a 9/80 schedule. This schedule may prohibit shutdowns for tie-ins on alternating Fridays. After hours work or weekend work may be performed if prior authorization from the Engineer is obtained.

Other than the hours specified in this Invitation for Bids, requests by Contractor for after hours or weekend work is to be avoided whenever possible. Any overtime costs incurred by City for such work shall be borne by Contractor.

Interruption of utilities service to commercial customers shall be coordinated with the customer to minimize disruption to the enterprise to the greatest extent practicable. After notification by the Contractor of the need, the City of Santa Rosa Water Department will contact all commercial customers and inform Contractor accordingly.

6-4.01C Water Facility Damage: All damage caused to the City's water system shall be immediately reported to the Engineer.

Damage caused to the City's water system by Contractor's operations shall be repaired by the Contractor at Contractor's sole expense in a manner satisfactory to the City of Santa Rosa Water Department. Such repairs shall not be charged to the City or any City project. All repair work shall be witnessed and approved by the City of Santa Rosa Water Department prior to backfilling the excavation. The City will require re-excavation if backfilling occurs prior to inspection, which costs shall be borne by Contractor.

Contractor is responsible for, at its sole cost and expense, the repair and remediation of damage to property and facilities caused by any of the following circumstances:

a. Contractor fails to make a written request for a markout or begins excavation without providing the City of Santa Rosa Water Department a reasonable opportunity to mark facilities;

b. Contractor destroys markouts;
c. Contractor fails to perform hand digging or probing for utilities near markouts; or
d. Contractor fails to use reasonable caution, regardless of whether markouts are present or clear. Reasonable caution includes any efforts to avoid damaging existing facilities, such as when excavating in the vicinity of water mains.

City may, in its discretion, opt to make the repairs for which Contractor is responsible with its own forces. In such cases, the repairs will be made at Contractor's expense in accordance with the emergency repair rate schedule of the City of Santa Rosa Water Department. The City may make repairs whenever restoration of service requires extraordinary speed or special equipment. Contractor will be billed accordingly and City shall have the right and option to withhold payment hereunder, or a portion thereof, for any such costs billed but not promptly paid by Contractor.

6-4.02 Salvage: All valves, hydrants, and other appurtenances of the water system that are the property of City and removed by Contractor shall be delivered to the City's Municipal Services Center (55 Stony Point Road) unless Contractor has obtained specific written approval from the City of Santa Rosa Water Department to otherwise dispose of the materials.

6-4.03 Trade Names and Alternatives: Unless otherwise specified, material and equipment specifications that identify a particular patent, trade name or manufacturer, may be satisfied through substitute materials and equipment accepted by the City. Contractor may offer substitute materials and equipment of equal or better quality to the City. Any such offer shall be made in writing to the Engineer at least four weeks in advance of the time Contractor wishes to order the materials or equipment. Contractor shall include sufficient data which, together with any other information the Engineer may require, will enable the Engineer to determine the acceptability of the materials and equipment. When the substitute materials or equipment necessitate changes to any part of the work, the information shall include drawings and details showing all such changes and Contractor shall perform these changes as a part of any acceptance of substitute materials or equipment. The use of substituted materials and equipment will be permitted only after written acceptance of the materials and equipment by the Engineer. Such acceptance shall not relieve the Contractor from full responsibility for the sufficiency, quality and performance of the substitute materials and equipment.

The City will not, under any circumstances, acknowledge or consider any offers to accept substitute materials or equipment between the dates of public notice of advertisement and the bid opening.

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.02A(1) Forfeitures for Health and Safety Violations: Contractor shall comply with all applicable provisions of the Santa Rosa City Code and any failure to do so shall constitute a breach of the Contract. In the event of any violation of the Santa Rosa City Code that may impact public health and safety, including, but not limited to Chapter 17-12, "Storm Water" and Chapter 13-04, "Street Encroachments," City shall have the right to impose a charge against Contractor in an amount equal to $500.00 per violation per day. Prior to the imposition of any charge hereunder, City shall first provide a written notice to Contractor of the violation and setting forth a reasonable period of time for Contractor to cure the violation(s). In the event Contractor fails to cure any such violation within the time provided, City shall have the right, in addition to all other rights and remedies available to City, to deduct and withhold as a permanent forfeiture by Contractor the appropriate amounts from any payment otherwise due Contractor under this Contract.

7-1.02K(2) Wages: Pursuant to Labor Code sections 1770 *et seq.*, each laborer or mechanic of Contractor or any subcontractor engaged in work on the project under this contract shall be paid not less than the hourly wage rate of per diem wages set forth in the prevailing wage rate schedule published by the Director of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor and such laborers and mechanics. A copy of the schedule of prevailing wage rates can be obtained online at www.dir.ca.gov or from the Department of Transportation and Public Works at 69 Stony Circle, Santa Rosa.

Any laborer or mechanic employed to perform work on the public works project under this Contract, which work is not covered by any of the foregoing classifications, shall be paid not less than the prevailing wage rate of per diem wages specified herein for the classification which most nearly corresponds to the work to be performed by the worker.

The foregoing specified prevailing wage rates are minimum rates only, and Contractor may pay any wage rate in excess of the applicable rate.

Pursuant to Labor Code Section 1775, Contractor as a penalty to the owner shall forfeit not more than $200.00 for each calendar day, or a portion thereof, for each worker paid less than the prevailing wage rate established by the Department of Industrial Relations for such work or craft in which such worker is employed. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.

Contractor shall only provide prevailing wage reports upon written request from City. When requested, these prevailing wage reports must be redacted by the Contractor prior to providing them to City.

7-1.02K(4) Apprentices: Contractor agrees to comply with Chapter 1, Part 7, Division 2, sections 1777.5 *et seq.* of the California Labor Code. These sections require contractors and subcontractors to employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice work for each five hours of journeyman work (unless an exception is granted in accordance with Section 1777.5), and the contractors and subcontractors shall not discriminate among otherwise qualified employees as apprentices solely on the ground of sex, race, religion, creed, national origin, ancestry, or color. Only apprentices as defined in Labor Code section 3077, who are in training under apprenticeship standards and who have written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

7-1.02K(6)(a)(1) Notice to Vendors: Attention is directed to the current OSHA Standards. All equipment, tools and materials which are furnished and/or installed as part of this Contract shall meet or exceed the aforementioned standards in order to be considered acceptable.

7-1.02K(6)(b) Excavation Safety: When the digging or excavation occurs during project construction, Contractor shall:

a. Promptly notify City in writing of the following conditions before any such conditions are disturbed:

   1. Material that the Contractor believes may be hazardous waste as defined in Health and Safety Code section 25117 that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law;
   2. Subsurface or latent physical conditions at the site differing from those indicated in the Invitation for Bids; and
   3. Physical conditions at the site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in the type of work under the Contract.

b. The City will investigate the conditions and will issue a change order under the terms of the Contract if it finds that the conditions warrant it.

c. If a dispute arises between City and Contractor as to whether a change order is warranted, Contractor shall not be excused from any scheduled completion date provided for in the Contract but shall proceed with all work to be performed under the Contract.

7-1.02K(6)(b)(1) Trench Excavation Safety Plans: When the estimated cost for the excavation of any trench or trenches five feet or more in depth will exceed $25,000.00, Contractor shall submit to the Engineer 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. If such plan varies from the shoring system standards established by the construction safety orders, or if the trench is anticipated to be greater than 20 feet, the plan shall be prepared by a registered civil or structural engineer.

A permit to do the above described work shall be obtained from the State of California, Division of Industrial Safety. Proof of such permit shall be submitted to the Engineer prior to starting the trench work.

Full compensation for complying with the provisions of this section shall be considered as included in the Contract price and no additional allowance will be made for the work.

7-1.02K(6)(d) Confined Space Safety: Any confined space entry for this project, including but not limited to manhole or water storage tank entry, will require a confined space entry permit pursuant to Cal/OSHA regulations as set forth in title 8 California Code of Regulations (CCR) sections 5157 or 5158. Confined space entry shall have the meaning ascribed in title 8 CCR sections 5157 and 5158. For any confined space entry for construction operations regulated by title 8 CCR section 1502, Contractor shall comply with title 8 CCR section 5158, "Other Confined Space Operations." For any other confined space operations, Contractor shall comply with title 8 CCR section 5157, "Permit-Required Confined Spaces."

Attention is directed to the technical specifications in the Special Provisions for information regarding entry to any City maintained confined space. Pursuant to title 8 CCR section 5157, Contractor is required to obtain any available information regarding hazards and operations for any City maintained confined spaces. The City maintained Confined Space Entry Manual is available

for viewing at the City of Santa Rosa Water Department or Transportation and Public Works Department office at 69 Stony Circle, Santa Rosa.

Contractor shall immediately inform the Engineer of any previously unidentified hazards confronted or created during confined space entry.

7-1.02L(2)(a) Patents and Royalties: All fees, royalties, or claims for any patented invention, article, process or method that may be used upon or in any manner connected with the work under this Contract shall be paid by Contractor. Contractor and its sureties shall protect and hold harmless City and its officers, agents, and employees from any and all demands made for such fees royalties or claims brought or made by any third party, and before the final payment is made on the account of the Contract, Contractor shall, if requested by City, furnish acceptable proof of a proper release from all such claims and liabilities.

Should Contractor, its officers, agents, or employees, or any one of them be enjoined from furnishing or using any invention, article, material, or plans supplied or required to be supplied or used under the Contract, Contractor shall promptly substitute other articles, materials, or appliances in lieu thereof of equal efficiency, quality, finish, suitability, and market value, and satisfactory in all respects to the Engineer. In the event that the Engineer elects, in lieu of such substitution, to have supplied and to retain and use any such invention, article, materials, or plans as may be required to be supplied by the Contract, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for City, its officers, agents, and employees, or any one of them to use such invention, article, materials, or appliance without being disturbed or in any way interfered with by any proceeding in law of equity on account thereof. Should Contractor neglect or refuse to make the substitution promptly or to pay such royalties and secure such licenses as may be necessary, then in that event the Engineer shall have the right to make such substitutions or City may pay such royalties and secure such licenses and charge Contractor even though final payment under the Contract may have been made.

7-1.02M(3) Mined Materials: California Public Contract Code section 20676 prohibits surface mining operators which are subject to the Surface Mining and Reclamation Act of 1975 (SMARA) from selling California mined construction material to the City unless the operator is identified in a list referred as the **3098 List.** The List, which is maintained by the Department of Conservation's Office of Mine Reclamation (OMR), changes throughout the year and can be viewed at the OMR website: http://www.consrv.ca.gov/OMR/ab_3098_list/index.htm. To confirm whether or not a specific operator is on the List at any given time, Contractor shall call the OMR at (916)323-9198.

7-1.03A Maintaining Traffic: Attention is directed to Sections 7-1.04 of the Standard Specifications and to the following modifications thereof.

If construction is within City owned right-of-way, provisions shall be made for the safe passage of public traffic through the work site at all times consistent with the requirements of Santa Rosa City Code Chapter 13-04.

Except for projects to be performed under a minor contract, Contractor shall install and maintain project identification signs at each end of the project or as directed by the Engineer two weeks prior to any construction activity. City shall furnish the appropriate sign panels upon request from Contractor. To mount the sign panels, Contractor shall furnish and install 4" X 4" posts or mount by other appropriate methods as approved by the Engineer. These sign panels shall be returned to the City Corporation Yard at 55 Stony Point Road after completion of the project.

Two weeks prior to any construction activity, advance notice signs for road closures shall be furnished and installed by Contractor at each end of the project and shall remain in place throughout the duration of the subject closure. Details of panel construction and lettering shall be approved by the Engineer.

Contractor shall furnish, install, and maintain at its expense all barricades, signs, lights, and other devices necessary to adequately warn of any obstructions to the traveled and pedestrian way and provide flaggers as necessary for the safety of public traffic and pedestrians and to provide access to property adjacent to the work site and Contractor shall comply with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, *et seq*.) (ADA) and any regulations and guidelines issued pursuant to the ADA.

Contractor shall comply with the current edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) for all items related to traffic within the work site.

Rain and other occurrences that may cause the suspension or delay of the work shall in no way relieve Contractor of its responsibility to provide traffic control and public access through the work site as specified herein. At all times, Contractor shall keep at the work site such materials, forces and equipment as may be necessary to keep roads, streets, and driveways within the work site open to traffic and in good repair and shall expedite the passage of such traffic, using such forces and equipment as may be necessary.

Should Contractor fail, in the opinion of the Engineer, to provide all the materials, forces and equipment necessary to maintain traffic through the work site as set forth herein, City may take steps necessary to remedy any such failure, including but not limited to causing such work to be performed and/or suspending any further work under the Contract. Any such remedial cost and expense incurred by the City, plus an administrative charge of 15%, shall be immediately due and payable by Contractor and may be deducted from any amounts owed to Contractor hereunder. In the event there are insufficient sums owed to Contractor hereunder to cover the foregoing costs and charges, City shall have the right to pursue any other remedy to recover the same, including but not limited to, proceeding against any surety or bond in favor of City. City's rights under Section 7-1.02 are intended to be in addition to and not in lieu of any charges imposed by City against Contractor under Section 7-1.02A(1) above for violations of the Santa Rosa City Code.

Contractor shall be responsible for informing emergency response agencies operating within the area of the work of obstructions to either public or private roads caused by reason of Contractor's operations hereunder.

Contractor shall make provisions for the safe passage of pedestrians around the project work site at all times.

8 PROSECUTION AND PROGRESS

8-1.01A Assignments: Once awarded, this Contract shall not be transferred, assigned, or sub-contracted, except as herein expressly provided without the prior written consent of the City in the City's sole and absolute discretion. See Section 5-1.12 of the Standard Specifications.

8-1.04B Standard Start: Contractor shall begin work within ten calendar days after the date authorized in the Notice to Proceed and shall diligently prosecute the Contract to completion before the expiration of:

40 WORKING DAYS

8-1.05 Time: Working days will be counted beginning with the day the Contractor begins work or with the tenth day after the date authorized in the Notice to Proceed, whichever occurs first.

Unless otherwise directed by Engineer, Contractor shall not conduct any activities that generate noise earlier than 7:00 a.m. or later than 7:00 p.m.

8-1.10 Liquidated Damages: Contractor hereby agrees that Contractor shall pay to the City liquidated damages for each and every calendar day delay over and above the number of working days prescribed above for finishing the work in the amount shown in Section 8-1.10 of the Standard Specifications.

9 MEASUREMENT AND PAYMENT

9-1.04 Force Account Work: All work done on a force account basis shall be recorded daily on report sheets prepared by Contractor and signed by both the Engineer and Contractor. Such reports shall thereafter be considered the true record of force account work performed during the project. Such reports shall be furnished to the Engineer and a copy retained by Contractor.

All extensions of labor, equipment, and material costs shall be completed by Contractor and submitted to the Engineer within 30 days of the completion of the extra work. Completed and extended extra work reports received later than the times herein prescribed may be deemed invalid and rejected without payment at the discretion of the Engineer.

9-1.07 Payment Adjustments For Price Index Fluctuations: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

9-1.16 Progress Payments: Once each month for progress pay purposes, the City will prepare a written estimate of the total amount of completed work and accepted materials purchased by Contractor but not installed. The City shall retain five percent of such estimated value of the completed work and the unused materials and pay Contractor the balance after deducting all previous payments and all sums to be retained under the provisions of the Contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract or when, in the Engineer's judgment, the total value of the completed work since the last estimate is less than $500.00. No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

After Contract acceptance, the Engineer will prepare a written proposed final estimate of the proposed final quantities of work completed under the Contract and the value of such work and will submit such estimate to Contractor. The City shall retain five percent of such estimated value of the work done and shall pay to Contractor the balance after deducting all amounts to be retained under the provisions of the Contract.

The City may, at its option and at any time, retain out of any amounts due Contractor sums sufficient to cover any unpaid claims of City or others, provided that sworn statements of all non-City claims shall have been filed with the Director of Finance.

9-1.16E(6) Substitution of Securities for Withheld Amounts: Pursuant to Public Contract Code section 22300, securities may be substituted for any moneys withheld by City to ensure performance under this Contract, provided that substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmer's Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 USC sections 1921 *et seq*.), and where federal regulations or policies or both do not allow the substitution of securities. At the request and expense of 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, which shall then pay such moneys to Contractor. The Director of Finance is authorized to execute substitution of securities agreements on behalf of the City. The City will return the securities to Contractor upon satisfactory completion of the Contract as determined by City in its sole discretion and the resolution of all outstanding claims against the securities. Contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Securities eligible for investment under this section shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by Contractor and the

City, provided that the substituted security is equal to or not less than five percent of the Contract amount.

Security substitutions must be submitted by Contractor and approved by City prior to the time of the first progress payment to be made under the Contract. No other method of substituting securities for retention will be accepted. The security substitution shall be done only upon execution of an agreement satisfactory to City which includes the following provisions:

a. The amount of securities to be deposited;
b. The terms and conditions of conversion to cash in case of the default of Contractor; and
c. The procedure for return of securities upon completion of the Contract.

9-1.17D Final Payment and Claims: The processing of payment of the final estimate shall not be commenced less than 35 days after the date of recording of the Notice of Completion with the County Recorder's Office. Contractor is advised that it takes approximately ten days for a check to be issued following a request for payment.

Contractor shall submit its written statement of all claims for additional compensation under the Contract to the Engineer within 15 days after submission to Contractor of the proposed final estimate.

If Contractor does not file a claim within the 15 day period, or upon Contractor's approval, the Engineer will issue a final written estimate and the City shall pay to Contractor the entire sum due after deducting all previous payments, if any, and all amounts to be retained under the provisions of the Contract.

If Contractor files a claim within the 15 day period, the Engineer will furnish a semi-final estimate and pay the amount due under the semi-final estimate within 30 days. The semi-final estimate is conclusive as to the amount payable except as may be affected by claims and any amount retained. The Engineer shall then consider and investigate such claim and shall make such revision in the final quantities as the Engineer may find to be due and shall then make and issue a final written estimate. The City will pay the amount due, after deducting all previous payments, if any, and amounts to be retained under the provisions of the Contract.

Any and all prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The final estimate shall be conclusive and binding against both parties to the Contract on all questions relating to the performance of the Contract and the amount of work done thereunder and compensation therefor, except in the case of gross error.

9-1.17D(3) Final Determination of Claims: Claims filed by Contractor shall be in sufficient detail to enable the Engineer to determine the basis and amount of the Claims. Contractor shall also furnish reasonable documentation to the City to support Claims. If additional information is required by the Engineer, Contractor shall provide such information to the Engineer no later than the 15th day after receipt of the written request from the Engineer. If the 15th day falls on a weekend, holiday, or day City offices are closed, then the information shall be provided to the Engineer no later than close of the next business day. Failure to submit the requested information to the Engineer within the time specified will be sufficient cause for denying the Claim.

Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated Claim investigator or auditor shall have access to those records and any other records as may be reasonably required by the Engineer to determine the facts or contentions in each Claim. Failure to grant access to such records shall be sufficient cause for denying the Claims.

9-1.22 Arbitration: Any references to Arbitration in the Standard Specifications are deleted in their entirety.

Claims submitted by Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code sections 12650 *et seq*., the undersigned,

_____,
(Name)

_____ of
(Title)

_____
(Contractor)

hereby certifies that the claim for additional compensation made herein is supported by a true statement of the actual costs incurred and time expended on this project and is fully documented by records maintained by Contractor.

Dated _____

/s/_____

Subscribed and sworn before me this _____ day of

_____

_____
Notary Public

My Commission Expires _____

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead expenses, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the City at its discretion.

Any costs or expenses incurred by the City in reviewing or auditing any claims that are not supported by Contractor's cost accounting or other records shall be deemed to be damages incurred by the City within the meaning of the California False Claims Act.

TECHNICAL SPECIFICATIONS

FOR

ROSELAND PAVEMENT MAINTENANCE-2021

CONTRACT NUMBER

C02345

2021



3/25/2021

12 TEMPORARY TRAFFIC CONTROL

12-1 General

12-1.01 General: Construction area traffic control devices shall be installed and maintained in accordance with the applicable sections of these Special Provisions, the Standard Specifications, the current Edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD), the Americans with Disabilities Act (ADA) and as directed by the Engineer.

12-1.03 Flagging Costs: The first paragraph of Section 12-1.03, "Flagging Costs" is amended to read:

> The cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic through the work under the provisions in Section 7-1.08, "Public Convenience", and Section 7-1.09, "Public Safety", shall be considered as included in the contract lump sum price paid for traffic control and no additional allowance will be made therefor.

12-3 Traffic-Handling Equipment and Devices

12-3.01 General: Prior to commencing construction which will affect existing vehicular and pedestrian traffic, the Contractor shall submit for review by the Engineer, Traffic Control Plans on 11" x 17" sheets of paper which contains only information specifically related to work zone vehicular and pedestrian traffic control. If Contractor proposes to use the current edition of the CA MUTCD published by Caltrans in lieu of a traffic control plan, in specific work operations, they shall submit in writing for consideration which Typical Application Diagram will be used and how it will be applied for each work operation. Traffic Control Plans or proposals shall be submitted for review at least two weeks prior to implementation.

Traffic Control Plans shall contain a title block which contains Contractor's name, address, phone number, project superintendent's name, contract name, dates and hours traffic control will be in effect, and a space for review acknowledgment.

The content of the Traffic Control Plan shall include, but is not limited to, the following:

1. Show location and limits of the work zone.
2. Give dimensions of lanes affected by traffic control that will be open to traffic.
3. Indicate signing, cone placement, and other methods of delineation and reference to appropriate City or Caltrans Standards.
4. Dimension location of signs and cone tapers.
5. Identify side streets and driveways affected by construction and show how they will be handled. Indicate intersections that require placing a traffic signal into “red flash”.
6. Show how pedestrian traffic will be handled through the construction site. Pedestrian pathways through the work zone shall be in compliance with the requirements of ADA during and after work hours.
7. Identify message board locations. A minimum of 8 changeable message boards shall be required. Location to be determined by Engineer.
8. Demonstrate how two-way traffic will be maintained.
9. Include full detour diagrams and placement of signs if implemented.

No work except for installation of project identification signs will be allowed to commence prior to approval of the Work Zone Traffic Control Plans.

12-4 Maintaining Traffic

12-4.01 Maintaining Traffic:

1. The full width of the traveled way shall be open for use by public traffic on Saturday, Sundays and designated legal holiday(s), after 4:00 p.m. on Fridays and the day preceding designated legal holidays, and when construction operations are not actively in progress; except as stated in Section 12-4.02 “Closure Requirements”.
2. The location of traffic control signing, barricades, and other facilities shall be monitored frequently (four to five times per day) by the Contractor to verify their proper location. All traffic signal and other traffic control devices shall be maintained at all times.
3. Contractor shall conduct his operations so as to cause the minimum obstruction and inconvenience to traffic and to places of business, multiple dwelling units, and residences adjacent to the work. Contractor shall notify the Engineer of his planned work and utility service interruption at least five working days in advance to allow time to notify residents and businesses.
4. When construction activities will prevent vehicle access to individual driveways Contractor shall notify the affected businesses and residents per Section 12-1.03, “Traffic Control”, of these Special Provisions. **Full access shall be provided to all driveways during non-working hours.**

12-4.01A Construction Traffic: Contractor shall submit a trucking route along with the traffic controls plans for approval by the Engineer. The route must minimize traffic on residential streets that are not part of the project.

Existing pavement damaged by Contractor's operations and not shown to be replaced shall be replaced at Contractor’s expense, per City Standards and to the satisfaction of the Engineer.

12-4.02 Closure Requirements: Attention is directed to Section 7-1.08, "Maintaining Traffic", to Section 5-1.05, "Order of Work," of these Special Provisions.

Exact locations of Project Identification signs and Advance Notice signs (Section 7-1.08 "Maintaining Traffic") shall be determined in the field by the Engineer.

Portable changeable message signs shall be installed on each end of the roadways to be sealed two weeks in advance of construction to notify the public of construction dates and possible delays. Portable changeable message signs shall remain in place until construction has been completed.

A flashing arrow sign shall be required at the beginning of any lane closure.

On streets with two lanes of travel in each direction, one lane shall be open in each direction at all times.

Lane closures, while maintaining one travel lane in each direction, will be permitted between the hours of 8:00 a.m. and 5:00 p.m. only. Only one lane at a time may be closed and no lanes shall be closed at any other hours unless specifically approved by the Engineer. Lane closures while maintaining one lane, two-way traffic control (flagging) will be permitted between the hours of 9:00 a.m. and 4:00 p.m. Contractor shall maintain vehicle access to homes and other properties at all times while work is in progress except as stated below.

Contractor will be permitted to close residential (one residence) driveways to vehicle access between the hours of 8:00 a.m. and 5:00 p.m. only after those residents that will be affected have been notified a minimum of 72 hours in advance. Individual residential driveway closures shall be limited to a maximum of three (3) hours.

At a minimum, Contractor shall provide three (3) certified traffic control personnel during slurry operations. The traffic control personnel shall be solely dedicated to traffic control operations during slurry.

Where it is necessary to close left turn lanes, two "No Left Turn" signs shall be placed, one at the closure and one in advance.

Contractor will be permitted to close cross streets and side streets where alternate access is available and only when necessary for the application of slurry. Where alternate access is unavailable, Contractor may delay cross streets and side street traffic for a maximum of 10 minutes.

Where it is necessary and permitted to close cross streets and/or side streets, a "Road Closed" sign shall be placed at the point of the closure and a "Road Closed Ahead" sign placed at a point preceding the intersection which allows motorists to take alternate routes around the construction area without backtracking.

Contractor shall not park construction vehicles contractor employee vehicles, stage materials or stockpiles in front of any business or residential driveway access and Contractor shall maintain access to private parking lots within the block where work is in progress. Construction vehicles shall not be left running for any length of time if parked in front of a business or residential unit.

Contractor shall keep the City of Santa Rosa Fire Department informed regarding the closure of any traveled way. At a minimum, Contractor shall call the Fire Department at 543-3535 and the Communications Center at 543-3666 daily to report any traveled way closure. This means immediately upon closure for that day and again immediately after removal of the closure. For closures over multiple days, the daily notification still applies. This requirement does not apply for single lane closures on multiple lane streets.

Contractor shall notify Sonoma County Transit at (707) 585-7516, Superintendent of Golden Gate Transit at (415) 257-4442, Santa Rosa City Bus at (707) 543-3922, Sonoma County Airport Express at (707) 837-8700, the local Postal Service at (707) 526-0113 and Santa Rosa Recycling and Collection at (707) 586-8234 5 calendar days prior to any lane closures or restrictions in turning movements.

Contractor shall contact and coordinate with the principal and/or office manager of the following schools to obtain the school calendar, and arrival / dismissal times of all grades within the school:

Roseland Elementary School: A Leadership Academy, 950 Sebastopol Road - (707) 545-0100

Sheppard Accelerated Elementary School, 1777 West Avenue - (707) 546-7050

Roseland Accelerated Middle School, 1777 West Avenue - (707) 546-7089

Roseland Creek Elementary School, 1683 Burbank Avenue - (707) 543-2800

Roseland University Prep High School, 1931 Biwana Drive - (707) 566-9990

Roseland School District Office, 1691 Burbank Avenue - (707) 545-0102

During the hours of drop-off and pickup times, Monday through Friday, Contractor shall halt all work within school zone limits of schools listed above to secure the work zone and open all lanes of traffic for the duration of drop-off and pickup. For all early dismissal days, Contractor shall be subject to these requirements for altered drop-off and pickup times.

If Contractor has been given an approved Traffic Control Plan that includes road closures, they shall maintain vehicular access to homes and other properties where work is in progress within the closure area.

Where necessary, and only after receiving written approval from the Engineer, Contractor may temporarily suspend curb side parking in their immediate work zone. Notification to businesses and residents shall be hand delivered at least 72 hours prior to construction in the affected areas.

Notification shall be as follows:

1. A notice placed on the front door of each home or business where curb side parking will be suspended and attempt made to notify each business or resident verbally that work will be underway within the block and that curb side parking will be suspended during stated working hours and request that vehicles be parked out of the roadway by 8:00 a.m.

2. Type 2 barricades every 50 feet adjacent to the curb where parking will be suspended with a notice posted on the barricade stating specific dates and times that curb side parking will be temporarily suspended. If work will not take place in the posted area, then Contractor shall remove "No Parking" notices.

Contractor shall maintain vehicle access to all homes and other properties along the work zone. During paving and slurry operations, Contractor will be allowed to temporarily suspend vehicle access to a limited number of driveways when approved by the Engineer. When approved by the Engineer and at least 72 hours prior to suspending access to any driveway, Contractor shall give both written and verbal notice to the affected businesses and residents and place barricades adjacent to the driveways with posted notices stating the specific dates and times of the suspension for that area. The notice shall also indicate an alternate parking location. Suspension of access to driveway will be permitted only as approved by the Engineer and only between the hours of 8:00 am and 5:00 pm.

Barricades and flaggers shall be positioned to allow safe turns at intersections and curves.

12-7 Temporary Pedestrian Walkways

12-7.01 Pedestrian Traffic Control: Contractor is directed to Chapter 6D, Pedestrian and Worker Safety, in the CA MUTCD, the improvement plans and these Special Provisions.

Pedestrians shall be provided with a safe convenient and accessible path, that at a minimum, replicates the most desirable characteristics of the existing sidewalk, path, or footpath. At no point along the road shall the sidewalks on both sides of the road be closed at the same time.

Contractor shall construct and maintain temporary pedestrian pathways through the work zone, where required, that shall be in compliance with the requirements of the Americans with Disabilities Act (ADA), and the CA MUTCD.

Pedestrian routes shall not be impacted for the purposes of any non-construction activities such as parking of vehicles or equipment, or stock piling of materials. Pedestrians shall not be led into conflicts with work site vehicles, equipment, or operations.

Pedestrian routes shall be open and accessible at the end of the workday unless an alternate ADA compliant route has been approved by the Engineer. The construction of curb ramps and/or long sections of sidewalk do not alleviate Contractor from this requirement.

12-9 Measurement and Payment

12-9.01 Payment: **Traffic Control** shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in **vehicular and pedestrian** traffic control, including but not limited to, providing, placing, maintaining, and removal of temporary paths and/or ramps, temporary relocation of regulatory signs, changeable message boards, project and public notification signs, flagging, excavation, compaction, furnishing, and placement of asphalt concrete and/or PCC, barricades, toe-rails, hand rails, complying with CA MUTCD Standards for Pedestrian Safety, coordination efforts and any other items necessary for vehicle and pedestrian traffic control not specifically enumerated in the plans or these specifications, and no additional allowance will be made therefor.

[Version: 04/29/15 DCM STD2010]

13 WATER POLLUTION CONTROL

13-1 General

13-1.01A: Water Pollution Control shall be performed in accordance with Section 13, Water Pollution Control, of the Standard Specifications and these technical specifications. In addition, construction activities shall comply with:

1. The California Water Quality Control Board, North Coast Region Order No. R1-2009-0050, National Pollutant Discharge Elimination System Municipal Storm Water Permit, Part 8 – Development Construction Program, Sections 1 through 5, commonly referred to as the "Storm Water Permit". A copy of the Storm Water Permit is available for review at the City of Santa Rosa Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, CA, and at www.srcity.org/stormwaterpermit.
2. The California Stormwater Quality Association Storm Water BMP Handbook for Construction (CASQA Handbook). BMPs shall be selected, installed and maintained in accordance with the latest edition. A copy of the handbook can be viewed at the City of Santa Rosa Department of Transportation and Public Works office at 69 Stony Circle or downloaded from CASQA, http://www.casqa.org/.

In this technical specification the CASQA Handbook BMP numbers are appended to the associated Standard Specification sections. If a conflict occurs the CASQA Handbook BMP's shall govern.

13-2 Water Pollution Control Program

13-2.01B Submittals: The program to control water pollution required to be submitted under this section of the Standard Specifications shall include a spill contingency plan that establishes clean-up procedures that will be followed in the event of a spill of potentially hazardous, toxic, or polluting materials.

13-2.04 Payment: The City pays you to prepare **Water Pollution Control Program** at the **lump sum** price for Water Pollution Control and as follows:

13-3 Storm Water Pollution Prevention Plan

13-3.01A Summary: This project is exempt from the State Water Resources Control Board General NPDES Permit for the Discharge of Storm Water related to Construction Activities (Construction General Permit), and not required to have a Storm Water Pollution Prevention Plan (SWPPP), therefore Section 13-3, Storm Water Pollution Prevention Plan, of the Standard Specifications does not apply to this project.

13-4 Job Site Management

13-4.03B: Spill Prevention and Control / CASQA Spill Prevention and Control (BMP WM-4):
If a spill occurs at the construction site and the contractor does not take immediate and adequate steps to contain and clean up the spill, especially if rain is threatening or if a discharge to a storm drain or creek could occur, the City shall have the right, in its sole and absolute discretion, to clean up the spill using City forces or an independent contractor. The cost of any such cleanup, in addition to recovery of any penalty or fine imposed upon the City, plus an administrative charge of fifteen percent (15%) of the costs incurred by the City, shall be deducted from any amounts owed to Contractor hereunder.
In the event there are insufficient amounts owed to Contractor hereunder to cover the foregoing costs and charges, the City shall have the right to pursue any other remedy to recover same,

including, but not limited to, proceeding against any surety or bond in favor of the City. The City's rights under this section are intended to be in addition to and not in lieu of any imposed by the City against Contractor for violations of City Code Chapter 17-12, "Storm Water".

13-4.03C(2): Material Storage/CASQA Material Delivery and Storage (BMP WM-1)

13-4.03C(3): Stockpile Management/CASQA Stockpile Management (BMP WM-3): Do not block storm water flows.

13-4.03D(1): Waste Management/CASQA Solid Waste Management (BMP WM-5): Contractor shall dispose of all trash, rubbish, and waste materials of any kind generated by the contractor, subcontractor, or any company hired by Contractor on a daily basis.

13-4.03D(3): Concrete Waste/CASQA Concrete Waste Management (BMP WM-8): Ensure the containment of concrete washout areas and other washout areas that may contain pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

13-4.03D(4): Sanitary and Septic Waste/CASQA Sanitary and Septic Waste Management (BMP WM-9): Sanitation facilities must be maintained periodically by a licensed service to keep them in good working order and prevent overflows. Portable toilets are required to have secondary containment.

13-4.03D(5): Liquid Waste: Liquid waste includes water generated from excavation dewatering. Minimize transfer piping by locating containers near the excavation to be dewatered while protecting the containers from moving vehicles and equipment.

13-4.03E(1): Water Control and Conservation/CASQA Water Conservation Practices (BMP NS-1 and NS-2)

13-4.03E(3): Vehicle and Equipment Cleaning/CASQA Vehicle and Equipment Cleaning (BMP NS-8)

13-4.03E(4): Vehicle and Equipment Fueling and Maintenance/CASQA Vehicle and Equipment Fueling (BMP NS-9), and CASQA Vehicle and Equipment Maintenance (BMP NS-10)

13-4.03E(7): Paving, Sealing, Sawcutting, Grooving, and Grinding Activities: As listed in Part 9, sections 4 and 5 of the Storm Water Permit, the following additional BMPs shall be implemented for street paving, repaving, reconstruction, patching, dig outs or resurfacing.

1. Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions.
2. Install gravel bags and filter fabric or other appropriate inlet protection at all susceptible storm drain inlets and manholes to prevent paving products and tack coat from entering the storm drain.
3. Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses.
4. Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
5. Clean equipment over absorbent pads, drip pans, plastic sheeting, or other material to capture all spillage and dispose of properly
6. Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled, or disposed of properly **13-4.03D(5)**.

7. Collect solid waste by shoveling and vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled, or disposed of properly **13-4.03D(5).**
8. Cover "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm **13-4.03C(3).**
9. Cover loads with tarp before haul-off to a storage site, ensuring that trucks are not overloaded.
10. Minimize airborne dust by using water spray during grinding **14-9.03** and**;**
11. Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or watercourses **13-4.03C(1)**,

13-4.03F: Sweeping/CASQA Street Sweeping and Vacuuming (BMP SE-7)

13-4.04 Payment: Job Site Management shall be paid for at the contract lump sum price for Water Pollution Control.

13-6 Temporary Sediment Control

13-6.03C: Temporary Drainage Inlet Protection / CASQA Storm Drain Inlet Protection (BMP SE-10)

13-6.04: Payment: Temporary Sediment Control shall be paid for at the contract lump sum price for Water Pollution Control. The contractor pays all maintenance costs.

14 ENVIRONMENTAL STEWARDSHIP

14-9.03 Dust Control

14-9.03A General: Sweeping per section 14-9.03C shall also be performed to prevent and alleviate dust.

Sweeping, covering stockpiles, applying water, and/or dust palliative, to control dust caused by public traffic is not change order work.

14-9.03C Construction: All dust-producing work and unpaved construction sites shall require a minimum watering in the middle and ending of each workday. The frequency of watering shall increase if dust is airborne. Watering shall not produce runoff.

Contractor shall maintain dust control to the satisfaction of the Engineer, 7 days a week, 24 hours per day.

At the end of each workday, Contractor shall thoroughly sweep all streets in the work zone to minimize airborne dust.

At the end of each work week Contractor shall sweep all streets in the work zone with a commercial street sweeping truck equipped with a rear pick up broom.

At the Engineer's discretion additional sweeping or watering may be required, including the use of a commercial street sweeping truck equipped with a rear pick up broom, at any time or place.

14-9.03D Payment: Full compensation for conforming to this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed.

14-10.01 General: Contractor shall dispose of all Portland cement concrete and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials. Contractor shall provide receipts verifying delivery and approximate quantity (in tons) of the material delivered to a material recycler.

All other excess materials from the project shall become the property of Contractor and shall be disposed of by him, at his expense.

14-10.02A(1) Submittals: Submit a Solid Waste Disposal and Recycling Report prior to final acceptance of work performed under the Contract. Show the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project.

Submit a Solid Waste Disposal and Recycling Report prior to Contract acceptance. Show the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project.

14-10.02D Payment: Full compensation for material recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

15 EXISTING FACILITIES

15-1.02 Preservation of Property

15-1.02A Protect Existing Access Covers Prior To Slurry: Prior to slurry, all manhole, valve, rodding inlet, monument, and all other utility access covers shall be protected from Contractor's slurry operations by applying a sheet of plastic, cut to fit, or placing a plastic bag over the exposed facilities or other methods approved by the Engineer. All traces of plastic and excess surfacing material shall be removed from all access covers as quickly as possible after the application of the slurry and in no case remain in place more than 24 hours. All access covers shall remain locatable at all times. Placing a temporary pavement marker or equal on each cover prior to slurry application is acceptable.

Any slurry material deposited on manholes, valves, rodding inlets, monument, and all other utility covers shall be removed immediately, by Contractor, at its expense.

15-1.02B Payment: Protect existing access covers prior to slurry shall be considered as included in the various items of work under Section 37-3 "High Volume Traffic Slurry Seal" and shall include full compensation for furnishing all labor, tools, equipment and doing all the work involved including furnishing, installing, and removing plastic sheeting or plastic bags complete in place as specified and no additional compensation will be made therefor.

15-2.02C Traffic Stripes and Pavement Markings Removal: Existing thermoplastic pavement markings, thermoplastic traffic stripes, inlaid thermoplastic tape, and tape traffic stripes shall be removed to the fullest extent possible from the pavement by grinding prior to slurry. Sand or other material deposited on or adjacent to the pavement as a result of removing pavement markings shall be removed as the work progresses. Existing pavement markings shall not be removed more than **three days** in advance of slurry. Care shall be taken not to remove any more material than is necessary.

At all times during removal operations, a commercial street sweeping vehicle shall be used to remove grindings and debris from the roadway in accordance with Section 14-9.03C. The sweeper shall perform a final cleaning of the entire removal area at the end of the day.

Contractor shall provide, install, and maintain temporary reflective pavement markings on the same day as the permanent pavement markings are removed or as directed by the Engineer and maintain these until final markings are in place. Temporary stripes and markings shall be tape, paint, or approved equal. All surfaces that have received grinding shall be clean and dust removed prior to applying paint or tape for temporary or permanent delineation.

15-2.02D Pavement Markers Removal: Existing pavement markers shall be removed prior to the slurry of existing road surfaces. The Contractor shall be responsible for the proper disposal of pavement markers, bumper blocks, and delineators away from the site of work. Existing pavement markers shall not be removed more than **three days** in advance of slurry.

Temporary markings depicting lane lines, crosswalks, and turning lane markings shall be in place at the end of each day.

At all times during removal operations, a commercial street sweeping vehicle shall be used to remove grindings and debris from the roadway in accordance with Section 14-9.03C. The sweeper shall perform a final cleaning of the entire removal area at the end of the day.

Contractor shall provide, install, and maintain temporary reflective markers on the same day as the existing permanent markers are removed or as directed by the Engineer and maintain this delineation until final pavement markers are in place. Temporary markers shall be reflective, self-adhesive plastic or equal. All temporary markers shall be maintained by the Contractor until placement of permanent pavement markers.

15-2.02M Removal Methods: Before obliterating any pavement delineation (traffic stripes, pavement markings, and pavement markers) that are to be replaced on the same alignment and location, as determined by the Engineer, the pavement delineation shall be referenced by Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. Contractor shall measure and record the locations and dimensions of all traffic stripes and pavement markings prior to removal. The references shall include the limits or changes in striping pattern, including one and two-way barrier lines, limit lines, crosswalks, and other pavement markings. This information shall be reviewed by the City prior to the removal of the pavement delineation.

Painted traffic stripes and painted pavement markings are not required to be removed prior to slurry.

All thermoplastic traffic stripes, thermoplastic pavement markings and tape traffic stripes within the limits of slurry are required to be removed prior to slurry.

15-2.13 Payment: Full compensation for Traffic Stripes, Pavement Markings, and Pavement Markers Removal shall be considered as included in the various items of work under Section 84, "Traffic Stripes and Pavement Markings" and Section 85 "Pavement Markers" and shall include full compensation for furnishing all labor, tools, equipment and doing all the work involved including furnishing, installing, maintaining, and removing temporary pavement markings and pavement markers, complete in place as specified and no additional compensation will be made therefor.

(STD2010)

37 BITUMINOUS SEALS

37-3 High Volume Traffic Slurry Seal

37-3.01 General

37-3.01A Summary: High Volume Traffic (HVT) Slurry Seal shall conform to the applicable provisions of Section 37-3 of the Standard Specifications and these Special Provisions. The mix shall be a "quick traffic system", meaning that it will be able to accept traffic within 1 hour after placement in +75 degrees Fahrenheit temperature and 50 percent or less humidity.

The performance of the operator shall be reviewed by the Engineer on a daily basis. If performance is found to be unsatisfactory, Contractor shall replace the operator to the satisfaction of the Engineer within two days of direction.

Each crew, at a minimum, shall be composed of a non-working foreman, a coordinator at the project site at all times, a competent mixing operator, a competent driver, traffic control personnel and sufficient personnel to load trucks.

No material shall be placed on wet pavement without prior approval from the Engineer.

The limits of work shall be marked by the Engineer in the field and as shown on the map located in these Special Provisions.

Contractor shall provide barricades and other traffic control devices as necessary to eliminate traffic on areas of fresh material that might sustain damage from such traffic. Any tracking of emulsion on public or private property will be the responsibility of Contractor to correct and shall be removed by a method acceptable to the property owners and the Engineer. Sandblasting or soda blasting may be required.

The cost of the repair, cleanup and/or damage caused by vehicles tracking through the material shall be borne solely by Contractor.

37-3.01C Submittals: For each bituminous seal proposed, Contractor shall provide a mix design for the City's review and furnish a sample of aggregate for testing a minimum of two weeks prior to start of work.

37-3.01D Mix Design: Contractor shall submit for approval a complete mix design prepared and certified by a Laboratory. Compatibility of the aggregate, polymer-modified emulsion, mineral filler, and other additives shall be verified by the mix design. The mix design shall be made with the same aggregate gradation that Contractor will provide on the project.

37-3.02 Materials

37-3.02B(1) General: Water shall be potable, free of harmful soluble salts or reactive chemicals and any other contaminants.

Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. Additives must be included as part of the mix design and be compatible with the other components of the mix.

37-3.02B(2) Aggregate:

Aggregate for bituminous seals must be Type II, and have the quality characteristic as specified below:

Sieve Size	Percentage Passing
3/8	100
No. 4	94-100
No. 8	65-90
No. 16	40-70
No. 30	25-50
No. 200	5-15

High Volume Traffic Slurry Seal:

Sand Equivalent	65 minimum
Durability Index	65 minimum
Methylene Blue Value	10 maximum per AASHTO T330-07 (2001)
Aggregate Application Rate: Dry Pounds Per Yard	16 – 18 pounds per square yard

The aggregate shall be a manufactured crushed stone such as granite, slag, limestone, chat, or other high-quality aggregate, or combination thereof. To assure the material is totally crushed, 100 percent of the parent aggregate will be larger than the largest stone in the gradation to be used.

When tested in accordance with AASHTO T27 (ASTM C136) and AASHTO T11 (ASTM C117), the target (mix design) aggregate gradation (including the mineral filler) shall be within the Type II specifications indicated above.

The job mix (target) gradation shall be within the gradation band for the desired type. After the target gradation has been submitted, then the percent passing each sieve shall remain within the gradation band. The percent passing shall not go from the high end to the low end of the range for any two consecutive screens.

The aggregate shall be inspected, accepted, or rejected at the job location stockpile or when loading into the support units for delivery to the lay-down machine. The stockpile shall be accepted or rejected based on five gradation tests according to ASTM D75 or CTM 202. Sampling of the stockpile material shall be performed in accordance with CTM 125. If the average of the five tests is within the gradation tolerances, then the materials will be accepted. If the tests show the material to be out of specification, Contractor will be given the choice to either remove the material or blend other aggregate with the stockpiled material to bring it into specification.

The Contractor shall furnish to the Engineer weight or load slips verifying the quantities of aggregate and emulsion. Slips shall be provided to the Engineer on the day of the delivery to the pit site.

37-3.02B(3) Asphaltic Emulsion: The asphaltic emulsion shall be a quick-traffic polymer modified asphaltic emulsion conforming to the requirements specified in AASHTO M208 or ASTM D2397 for CQS-1h. Polymer content shall consist of a minimum of 2-3/4 percent of latex by weight to create a latex modified emulsion (LMCQS1h). The cement mixing test shall be waived for this emulsion.

Contractor shall submit a certificate of compliance from the polymer manufacturer at least 5 days prior to the application of HVT slurry seal.

The five (5) day settlement test may be waived, provided job stored emulsion is used within thirty-six (36) hours from the time of the shipment, or the stored material has had anti-settlement emulsion blended into it at time of manufacture.

Each load of asphaltic emulsion shall be accompanied with a Certificate of Analysis/Compliance to assure that it is the same as that used in the mix design.

For every sieve size that is out of the allowable gradation margin, a $5 per ton deduction will be applied, and the material may be subject to refusal at the discretion of the Engineer.

If aggregate samples do not meet the minimum sand equivalent and durability index requirements established in this subsection, you shall be penalized as follows:

For sand equivalent and/or durability index values below 65 and above 59, a $20 per ton deduction for the total quantity of non-compliant aggregate placed on the project shall be assessed against the contract bid price for (HVT) Slurry Seal.

For sand equivalent and/or durability index values of 59 and below, City shall not compensate contractor for entire quantity of non-compliant material placed on the project.

37-3.02B(4) Mineral Filler: Mineral filler, if required, shall be any recognized brand of non-air entrained Portland cement or hydrated lime that is free from lumps. It may be accepted upon visual inspection. The type and amount of mineral filler needed shall be determined by a laboratory mix design and will be considered as part of the aggregate gradation. An increase or decrease of less than one percent (1%) may be permitted when the slurry seal is being placed, if it is found to be necessary for better consistency or set times.

37-3.03 Construction

37-3.03A General: In no case shall any lane remain closed to traffic for more than 1.5 hours after HVT slurry seal application. Upon opening any lane, Contractor shall ensure the mix will not ravel, shove, or displace due to traffic.

Contractor shall submit to the Engineer a HVT slurry seal schedule in addition to the construction schedule in accordance with Section 5-1.05 “Order of Work”. The schedule shall clearly show the sequence of slurry sealing specifically detailing each individual lane on each street and shall include the dates, start times, and end times of each lane. The schedule shall include a corresponding map that illustrates all of the items mentioned above. Daily schedules shall not exceed 250,000 square feet of production per day.

HVT slurry seal shall **NOT** be placed on Burbank Avenue, Sebastopol Road, or West Avenue on the same day and shall be reflected in the schedule.

The schedule shall be received and accepted by the Engineer a minimum of three weeks prior to slurry sealing.

Contractor shall adhere diligently to the approved schedule in the production of work.

Any changes in Contractor’s planned sequence or timing of work shall be submitted to the Engineer immediately in writing and accompanied by an updated schedule for the Engineers approval. Any residents or businesses affected by the approved changes to Contractor’s schedule shall be re-notified a minimum of 72 hours prior to proceeding.

Prior to the slurry sealing operation, Contractor shall remove all existing thermoplastic striping, legends, and markings in accordance with Section 15-2.02C and all raised pavement markers in accordance with Section 15-2.02D.

Contractor shall protect all utility access covers in accordance with Section 15-1.02A.

Contractor shall not slurry concrete surfaces.

Contractor shall not apply slurry to stamped asphalt crosswalks.

Contractor shall protect all drainage inlets in accordance with Section 13.

Prior to the application of the HVT slurry seal, pavement surfaces shall be cleaned of all oil, debris, soil build up, grease spots, and vegetation from edge of pavement to edge of pavement along all street sections included in this contract.

To areas that have been patched with new asphalt within the last 60 days, Contractor shall apply a tack coat after thoroughly cleaning the area and before applying the slurry seal. Tack coat shall be SS-1h or SS-1 and shall be uniformly applied at an approximate rate of 0.10 to 0.15 gal/sy.

Contractor shall remove any and all vegetation within the HVT slurry seal limits by an acceptable and approved means, (i.e. manual and/or mechanical), remove dirt and debris from cracks, joints (including asphalt/gutter lip joint) and voids in the road surface within the limits of the project. Contractor shall apply an approved herbicide to the cracks, joints, and voids in the road surface to prevent the re-growth of vegetation through the road surface. The removal of vegetation and application of herbicide shall be performed to the satisfaction of the Engineer.

Contractor shall comply with all Federal, State, and local laws and regulations governing the use of chemicals for control of vegetation. Contractor shall permit treatment for weed control to be done by qualified, trained personnel under the supervision of a State Licensed Qualified Pesticide Applicator, using recognized and approved methods and materials.

Vegetation removed beyond the HVT slurry seal limits will be required to be replaced at Contractor's expense if requested by the Engineer.

The herbicide shall be applied by Contractor after vegetation removal and prior to crack sealing. All herbicides shall be submitted for approval by the Engineer and shall be certified for use in the State of California for the specific use intended. The application of the herbicide shall be performed in accordance with all applicable regulations. The herbicide shall be applied only on the roadway surface to be sealed and NOT in roadside ditches or drainage facilities. Any and all fines or clean-up costs for unlawful misuse or discarding of herbicides shall be the sole responsibility of Contractor. Mixtures and spread rates for the herbicides shall be determined by the manufacturer's specifications. Runoff resulting from wash down of the equipment or herbicide disposal shall not enter catch basins or drainage facilities.

Contractor shall make his/her own arrangements for temporary stockpile work areas for stockpiling and batching. Prior to beginning construction, Contractor shall provide the Engineer with a copy of the Temporary Use Permit with the landowner(s) for use of the stockpile area in accordance with Section 5-1.20B(4)(a).

If so desired, Contractor may utilize Southwest Community Park at 1698 Hearn Avenue for temporary stockpile work in accordance with the provisions stated below.

The stockpile areas shall be thoroughly cleaned, removing all excess material and any material contaminated by spilled material, and left with a neat, orderly appearance upon completion of the

sealing operations. Paved areas shall be cleaned and repaired to the satisfaction of the Engineer and property owner and striping replaced at the Contractor's expense. Prior to final payment, Contractor shall provide the Engineer with a letter from the Landowner(s) stating that said areas have been left in a condition satisfactory to the Landowner(s).

Contractor shall supply the Engineer with licensed weigh master's certificates of the weights of all aggregate and emulsion delivered to the job during the course of each day. Contractor shall present Weigh Master's certificates for the amounts of aggregate and emulsion not used at the completion of the contract at no cost to the City. Certified weight tags from a local scale with current CTM 109 certification will be required to establish weight of remaining aggregate and emulsion. The certificates shall be presented to the Engineer on the same day the aggregate and emulsions are delivered.
Contractor shall schedule and coordinate the delivery of aggregate to the stockpiles 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, any delivery tickets not so delivered may be rejected by the City and no payment made therefor. Any deviation from this process must have the prior approval of the Engineer.

Sanding shall be minimized and only used when absolutely necessary. When necessary at driveways and intersections to accommodate vehicular and pedestrian traffic, sweeping shall occur by the end of the following day. Sand shall not be applied until the HVT slurry seal can withstand pedestrian traffic. Any sand deposited on driveway aprons or sidewalks shall be removed by the end of that day.

Contractor shall install temporary raised pavement markers in accordance with Section 15-2.02D until the roadway surface is ready for permanent raised pavement traffic delineation.

37-3.03C Mixing and Spreading Equipment:

a. Inspection: Contractor shall provide the equipment proposed for the project for inspection and demonstration at the site or other location acceptable to the Engineer at least two working days prior to beginning work. Any equipment requiring repair or replacement as determined by the Engineer shall not be used on the work until the Engineer accepts its condition.
b. Maintenance: All equipment must be maintained and in good state of repair, including no oil leaks that could damage existing asphalt, concrete, or landscape areas. All equipment safety guards shall be in place, hydraulic hoses and fittings shall be in good condition.

In the event of equipment failure that Contractor determines the repair will require more than 24 hours, the Contractor shall (1) notify the Engineer immediately and (2) have a functional replacement piece of equipment on site and ready for work the morning after the determination was made.

Prior to a change of emulsion type or supplier, Contractor shall notify the Engineer and obtain approval. Contractor shall thoroughly clean all emulsion tanks and mixing units to prevent any chemical reaction between differing emulsions.

c. Trucks: Contractor shall furnish and continuously operate a minimum of 3 aggregate delivery trucks for each scheduled workday. The number of trucks used each day shall be

as shown on the approved schedule unless otherwise approved in advance by the Engineer. Failure by Contractor to adhere to this requirement will cause the City to sustain additional inspection costs that will be deducted from any compensation due Contractor. The Engineer shall determine these costs.

Prior to the beginning of operations, Contractor shall furnish, at no cost to the City, calibration certificates for each individual slurry truck and for the same type of material specified in this section from a certified weighmaster. The certificate shall be dated no more than 6 months prior to the date of start of construction.

All trucks which Contractor proposes to use, that exceed the legal weight limit, are required to have overweight permits from the City and jurisdictions within which they will be operated.
Flexible drags made of burlap or similar attached to the rear of the spreader box shall not be used and does not constitute a secondary strike-off.

d. Support Equipment: Support equipment such as frontend loaders shall be in good working order and sized to adequately perform the work without interruption.

37-3.03D Placing: A minimum of two (2) commercial street sweeping vehicles shall be provided and approved in advance by the Engineer. Sweeping vehicles shall be vacuum assisted power brooms.

Only place HVT slurry seal if both the pavement and air temperature are at least 50 degrees F and rising. Do not place any HVT slurry seal if rain is imminent or the air temperature is expected to be below 36 degrees F within 24 hours after placement.

Immediately prior to the sealing operations, Contractor shall sweep the entire surface with commercial street sweeping vehicles as required. Debris shall become the property of Contractor and disposed of at an approved refuse site. Transferring of the debris from the pickup vehicle or temporary stockpiling of debris will not be allowed. The use of a Contractor furnished debris box located at the staging/storage location for the disposal of sweeping debris is acceptable.

At all times during the street sweeping operation, Contractor shall apply adequate water to control dust. Dust control water shall not create runoff or flow into the gutter.

Streets shall be kept free of “raveling”. It will be Contractor’s responsibility to drive completed streets on a daily basis and evaluate whether or not streets require sweeping. The project inspector will also review completed streets and notify Contractor of streets requiring sweeping.

Contractor shall perform sweeping of all sealed streets a minimum of 3 times: the day after application (or the following Monday if applied on a Friday), 4 days after application and 7 days after application or as requested by the Engineer for a period of 10 days following the last day of application to remove all accumulations of loose material and maintain streets in a “ravel free” condition. Maintenance sweeping shall be done by commercial street sweeping vehicles equipped with automatic debris pickup. Where commercial street sweeping vehicles cannot remove loose material, including but not limited to driveways, sidewalks, and curb ramps, hand sweeping or equal shall be performed.

The HVT slurry seal mixture shall be uniformly spread on the existing road surface within the rate specified without spotting, re-handling, or otherwise shifting the mixture.

The HVT slurry seal mixture shall be of the proper consistency at all times, so as to provide the application rate required by the surface condition.

HVT slurry seal applied around curb ramps shall be squeegeed flush with the gutter lip at the curb ramp.

All incidental work such as surfacing of driveway aprons and returns shall be done concurrently with the surfacing of the street proper. The HVT slurry seal shall be applied from lip of gutter to lip of gutter. If no gutter exists, the HVT slurry seal shall be from edge of pavement to edge of pavement (or asphalt dike) . The edges of the limits of the slurry sealing application on both sides of the street shall be maintained in a neat and uniform line.

The mixture shall be uniform and homogeneous after placing on the surfacing and shall not show separation of the emulsion and aggregate after setting. The completed surface shall be of uniform texture and free from ruts, humps, depressions, or irregularities.

The HVT slurry seal shall be rolled after it has cured sufficiently so as not to pick up on vehicle tires, but not more than 2 hours after placement. The rollers shall be 5-ton self-propelled pneumatic rollers with tire pressure of 50 p.s.i. and water spray system. There shall be a minimum of two operating rollers on the same newly constructed surface, tandem rolling, during the compaction rolling process. The HVT slurry seal coat shall be given a minimum of three complete passes with the roller or until the material is compacted with a uniform surface. The entire surface of the HVT slurry seal shall be rolled in this manner including bike and parking lanes.

37-3.03E Maintenance Sweeping: Contractor shall perform sweeping of all sealed streets a minimum of 3 times: the day after application (or the following Monday if applied on a Friday), 4 days after application and 7 days after application and as requested by the Engineer for a period of 10 days following the last day of application to remove all accumulations of loose material and maintain streets in a “ravel free” condition. Maintenance sweeping shall be done by commercial street sweeping vehicles equipped with automatic debris pickup. Where commercial street sweeping vehicles cannot remove loose material, including but not limited to driveways, sidewalks, and curb ramps, hand sweeping or equal shall be performed.

Following completion of traffic striping replacement, Contractor shall sweep/vacuum all new traffic stripes and pavement markings to remove any excess retroreflective glass beads left remaining on the pavement surface.

37-3.04 Payment: HVT slurry seal is measured by combining the weight of the aggregate and asphaltic emulsion. The weight of added water and set-control additive are not measured.

Preparation For High Volume Traffic Slurry Seal shall be paid for at the contract price per **square foot** of street on which roadway preparation was performed and shall include compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the removal of vegetation, dirt/debris, sweeping, and application of herbicide complete in place, as specified in these Special Provisions and as directed by the Engineer and no additional compensation will be allowed therefor.

High Volume Traffic Slurry Seal will be paid for at the contract unit price per **ton**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, and doing all the work involved in constructing the slurry seal complete in place including protecting the seal from traffic damage until the mixture has cured sufficiently so that material will not adhere to the tires of vehicles, rolling, and maintenance sweeping for a period of 10 days as specified herein, and no additional allowance will be made therefor.

37-5 Crack Seal

37-5.01 General: This work shall consist of cleaning and filling the cracks with rubber asphalt joint seal as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer. All cracks ¼" or larger on the surfaces to receive slurry shall be filled.

37-5.02 Materials: The crack sealant shall be a mixture of paving asphalt and ground rubber and shall conform to ASTM D 5078, Type II. The crack seal product shall conform to the following requirements:

Test	Specification Limit
Cone Penetration 77°F(25°C)(ASTM D5329)	35-55
Resilience (ASTM D5329)	40% min.
Softening Point (ASTM D36)	200°F(93°C) min.
Ductility 77°F(25°C)(ASTM D5113)	30 cm min.
Flexibility (ASTM D3111 Modified)	Pass at 20°F (-7°C)
Flow 140°F(60°C)(ASTM D5329)	3 mm max.
Brookfield Viscosity 400°F(204°C)(ASTM D2669)	100 Poise max.
Asphalt Compatibility (ASTM D5329)	Pass
Bitumen Content (ASTM D4)	60% min.
Tensile Adhesion (ASTM D5329)	500% min.
Safe Heating Temperature	400°F(204°C)
Recommended Pour Temperature	380°F(193°C)

Contractor shall submit a certificate of compliance from manufacturer, certifying materials meets above specifications.

37-5.03 Construction: During all construction operations, Contractor shall protect cracks cleaned for sealing from intrusions of solid foreign materials into the groove or into the sealant.

All cracks indicating weed growth are to be sprayed and cleaned in accordance with Section 37-3.03A of these special provisions.

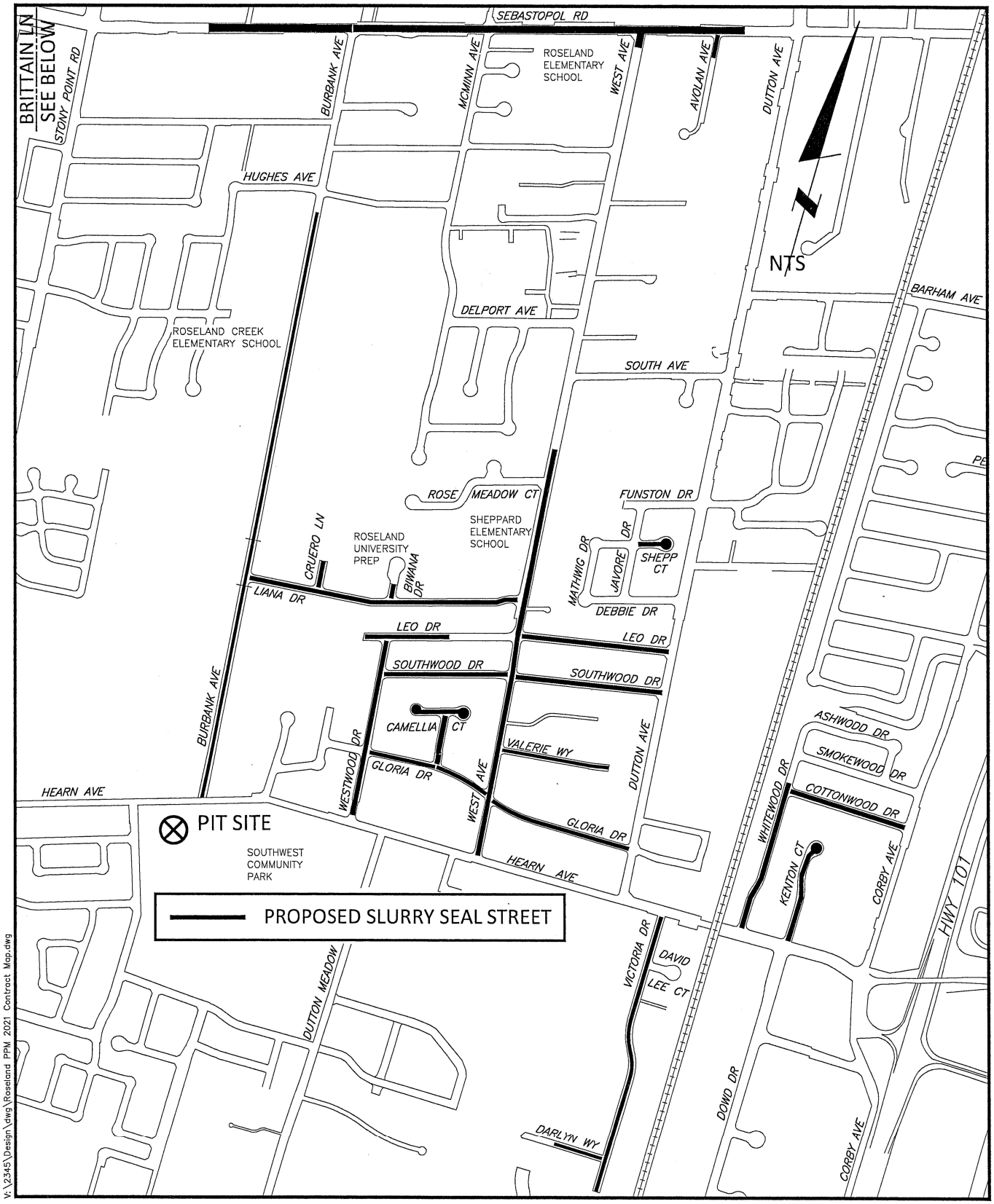
Immediately prior to applying the sealant, the cracks shall be cleaned with high pressure air jets to remove all residue and foreign material. Any weed growth shall be physically removed. Water jets will not be allowed. Crack surfaces shall be dry at the time the sealant is applied. Crack seal materials shall be placed in conformance with the manufacturer's recommendations. Crack seal materials shall not be placed when the surface temperature is below 50 degrees Fahrenheit.

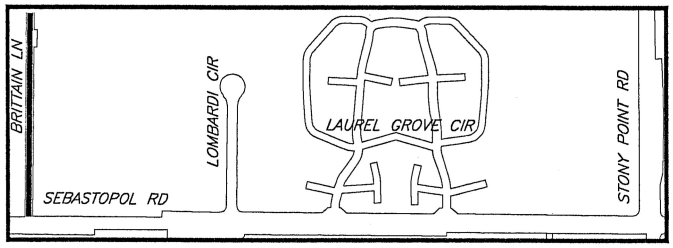
The finished crack seal shall be bonded to the crack such that there is no separation or opening between the sealant and the crack edge and there shall be no cracks, separation, or other opening in the sealant.

Contractor shall remove crack seal material that is not placed within the conformance of these provisions, clean cracks as specified herein and then reseal the cracks at his expense.

Before opening to traffic, apply the manufacturer's recommended detackifying agent to tacky crack treatment material on the traveled way.

37-5.04 Payment: Full compensation for Crack Seal shall be considered as included in the various items of contract work under "High Volume Traffic Slurry Seal" and shall include furnishing all labor, materials, tools, equipment, and doing all the work involved in placing the crack seal complete in place as specified herein and no additional allowance will be made therefor.





BRITTAIN LN DETAIL

CITY OF SANTA ROSA

ROSELAND
PAVEMENT PREVENTIVE MAINTENANCE
2021

C02345

Roseland Preventive Pavement Maintenance 2021

Street Name	Begin Location	End Location	SF Area	Street Designation
AVALON AVE	134' S/SEBASTOPOL RD	SEBASTOPOL RD	3,999	RESIDENTIAL
BIWANA DR	LIANA DR	END	3,395	RESIDENTIAL
BRITTAIN LN	SEBASTOPOL RD	SANTA ROSA CITY LIMIT	22,110	RESIDENTIAL
BURBANK AVE	HEARN AVE	34' S/LIANA DR	35,675	RESIDENTIAL
BURBANK AVE	34' S/LIANA DR	228' N/LIANA DR	9,045	RESIDENTIAL
BURBANK AVE	228' N/LIANA DR	1215	56,935	RESIDENTIAL
CAMELLIA CT	WEST END	EAST END	17,290	RESIDENTIAL
CAMELLIA CT	GLORIA DR	CAMELLIA CT	12,110	RESIDENTIAL
COTTONWOOD DR	WHITEWOOD DR	CORBY AVE	27,822	RESIDENTIAL
CRUCERO LN	LIANA DR	END	6,136	RESIDENTIAL
DARLYN WAY	END	VICTORIA DR	7,140	RESIDENTIAL
GLORIA DR	WESTWOOD DR	CAMELLIA CT	24,010	RESIDENTIAL
GLORIA DR	CAMELLIA CT	DUTTON AVE	27,010	RESIDENTIAL
KENTON CT	HEARN AVE	END	27,148	RESIDENTIAL
LEO DR	WESTWOOD DR	725	23,485	RESIDENTIAL
LEO DR	WEST AVE	DUTTON AVE	33,840	RESIDENTIAL
LIANA DR	BURBANK AVE	BIWANA DR	27,250	RESIDENTIAL
LIANA DR	BIWANA DR	WEST AVE	30,995	RESIDENTIAL
SEBASTOPOL RD	BURBANK AVE	140' E/AVALON AVE	147,125	ARTERIAL
SEBASTOPOL RD	712' E/STONY POINT RD	BURBANK AVE	56,420	ARTERIAL
SHEPP CT	MATHWIG DR	END	11,374	RESIDENTIAL
SOUTHWOOD DR	WESTWOOD DR	WEST AVE	28,408	COLLECTOR
SOUTHWOOD DR	WEST AVE	DUTTON AVE	34,210	COLLECTOR
VALERIE WY	WEST AVE	END	17,201	RESIDENTIAL
VICTORIA DR	END	HEARN AVE	44,738	RESIDENTIAL
WEST AVE	100' S/SEBASTOPOL RD	SEBASTOPOL RD	4,928	COLLECTOR
WEST AVE	HEARN AVE.	LEO DRIVE	47,988	COLLECTOR
WEST AVE	LEO DRIVE	200' N/ROSE MEADOW CT	44,715	COLLECTOR
WESTWOOD RD	HEARN AVE	LEO DR	40,491	RESIDENTIAL
WHITEWOOD DR	HEARN AVE	N/SIDE COTTONWOOD DR	34,683	RESIDENTIAL
Total:		SF=	907,676	

39 HOT MIX ASPHALT

39-1.01 General:

39-1.01A Summary: Section 39 includes specific specifications for producing and placing Hot Mix Asphalt (HMA) by mixing aggregate and asphalt binder at a mixing plant and spreading and compacting the HMA mixture.

39-1.01B Definitions: For these specifications, HMA and asphalt concrete shall be the same.

At the Contractor's option, and at no additional expense to the City, a Cal-trans approved Warm Mix Asphalt (WMA) technology may be added to the HMA. However, the asphalt concrete shall be manufactured at HMA temperatures (300F +/- 25F) at a dosage rate approved by the Engineer. All other HMA project specifications shall be adhered to.

Use Section 39-3 Method construction process of these specifications for HMA production and construction.

39-1.01C Description:

Asphalt Concrete Surface Repair shall consist of removing existing asphalt pavement by grinding and placing new asphalt in the grind area. Grind depths are as follows:

- 0.25 feet in streets designated as Residential streets.
- 0.35 feet in streets designated as Arterial or Collector streets.

See Section 37 for street designations.

Existing asphalt concrete paving shall be ground out as directed by Engineer. The exact areas, width, depths, and limits will be designated in the field by Engineer. Grinding widths shall vary from a minimum of 4 feet. There will be varying widths ranging from 4 feet up to a full street width, and shall not necessarily be in a contiguous pattern on the roadway surface.

72 hrs. prior to beginning pavement grind, Contractor shall contact the Underground Service Alert at 1-800-227-2600 and provide USA with all necessary data relative to proposed excavation. Attention is directed to Section 5-1.36E, "Obstructions", of these Special Provisions.

Contract documents do not indicate utility locations. Contractor shall be responsible for locating underground utilities by means of potholing at all locations where potential utility Conflicts may arise in areas to be excavated.

All excess excavated material shall be the property of Contractor. Prior to disposal of any excess material from the work site, Contractor shall submit to the Engineer written authorization for the disposal and entry permission signed by the owners of the disposal site. Contractor shall comply with all disposal regulations, such as City, County and/or State permits and licenses, as may be required. Attention is directed to Section 124, "Material Recycling" of these Special Provisions.

Contractor shall not remove more area than can be easily repaved that same day. All loose material shall be removed from the excavations.

Excavations shall be filled with HMA surface pavement in the manner and in the number of lifts as designated in Section 39-1.01 of these Special Provisions, and as directed by Engineer.

Contractor shall compact HMA with a minimum 7-ton vibratory roller to return the excavation to match surrounding grade and obtain a minimum 93% relative compaction.

HMA surface in areas of pavement grind shall be placed in a manner that does not cause deformation to the ground surface or the adjacent pavement. Contractor shall place HMA surface the same day that an area is ground. Traffic shall not be allowed on the ground surface prior to placement of HMA surface.

Roadway excavation and HMA surface paving shall be completed for half the street width before beginning excavation of the remaining street.

All existing asphalt concrete that is adhered to the top of gutters shall be removed prior to placement of new HMA surface in a manner satisfactory to the Engineer and that does not damage the gutter.

HMA surface shall be placed on the same day the area is excavated so that all areas will either have existing asphalt surface or new HMA surface by the end of each working day. No subgrade areas shall be exposed or open to traffic during non-working hours.

HMA surface paving shall be accomplished by use of a paving machine.

No longitudinal vertical drop offs will be allowed between the lanes when the roadway is opened to traffic.

All ground edges adjacent to curb ramps and driveways shall have temporary asphalt concrete ramps (tapers) installed until HMA surface is placed. Kraft paper or other bond breaker shall be placed under the conform ramps to facilitate removal when paving operations start.

Temporary asphalt tapers and associated bond breaker material shall be removed prior to placement of the HMA surface lift. Where the bond breaker material adheres to the asphalt concrete base course it shall be fully removed with a method, approved by the Engineer that will in no way degrade the quality of the final product.

The Contractor shall furnish an excavation and paving plan which shall include the following:

1. Requested location for survey staking of reference points
2. HMA plant supplying mix including aggregate source
3. Disposal site for spoils
4. Type of trucks and equipment to be used
5. Haul routes through adjacent residential streets
6. Staging locations
7. Sequencing
8. Taper grind locations

A tack coat of SS-1h or SS-1 shall be applied to all asphalt concrete and concrete surfaces, and allowed to break immediately in advance of placing all lifts of HMA. Tack coat shall also be applied to all vertical mating surfaces and conforms to existing pavement, curbs, gutters, and construction joints, and allowed to break immediately in advance of placing all lifts of HMA. The tack coat shall be reapplied 1) where it becomes contaminated, and 2) where it is significantly tracked (removed) from the surface.

The HMA surface course shall be allowed to cool to 160° F at mid depth before the roadway is opened to traffic each day.

At the end of each working day Contractor shall place retro reflectorized signs and delineators, as required for night time use in accordance with the Standard Specifications and Section 12 of these Special Provisions to warn the public of the existing conditions.

39-1.02 Materials

39-1.02B Tack Coat: Tack coat must comply with the specifications for asphaltic emulsion or asphalts. Tack coat shall be diluted SS1 or SS1h.

39-1.02C Asphalt Binder: Asphalt binder in HMA must comply with the specifications for asphalts.

Asphalt binder to be mixed with aggregate for HMA surface, leveling, and base shall be PG64-16 grade paving asphalt.

The amount of asphalt binder to be mixed with the aggregate shall be specified by the Engineer at the time of paving. Different asphalt binder content may be specified for each lift and each location.

Liquid anti-stripping agent (LAS) shall be added to the asphalt binder at a rate of 0.5 to 1.0% by weight of asphalt binder. The LAS shall be AD-here LOF 65-00 or equivalent, and shall be stored, measured, and blended with the asphalt binder in accordance with the anti-stripping agent manufacture's recommended practice. The LAS can be added at the asphalt plant or at the refinery. When added at the asphalt plant, the equipment shall indicate and record the amount of LAS added. If added at the refinery, the shipping ticket from the refinery shall certify the type and amount of LAS added.

39-1.02E Aggregate: The aggregate grading of the various types of asphalt concrete shall conform to one of the following as directed by the Engineer:

Surface or Leveling Course…….3/4-inch HMA Type A,

Aggregates should be of high abrasion resistance and durability. Excessively soft and friable aggregates are not allowed.

The specified aggregate gradation must be determined before the addition of asphalt binder and includes supplemental fine aggregate.

Aggregate Gradation
(Percentage Passing)
HMA Type A

3/4-inch HMA Type A

Sieve sizes	TV limits	Allowable tolerance
1"	100	--
3/4"	95–100	TV ± 5
3/8"	65–80	TV ± 5
No. 4	49–54	TV ± 5
No. 8	36–40	TV ± 5
No. 30	18–21	TV ±5
No. 200	2.0–8.0	--

Before the addition of asphalt binder and lime treatment, aggregate must have the values for the quality characteristics shown in the following table:

Quality characteristic	Test method	HMA Type A
Percent of crushed particles Coarse aggregate (% min.) One fractured face Two fractured faces Fine aggregate (% min) (Passing no. 4 sieve and retained on no. 8 sieve.) One fractured face	California Test 205	 90 75 70
Los Angeles Rattler (% max.) Loss at 100 rev. Loss at 500 rev.	California Test 211	 10 45
Sand Equivalent (min.) [a]	California Test 217	50 [b]
Fine aggregate angularity (% min.)	California Test 234	45
Flat and elongated particles (% max. by weight @ 5:1)	California Test 235	10

[a] Reported value must be the average of 3 tests from a single sample.
[b] Minimum Sand Equivalent of 45 for asphalt concrete base.

39-1.02F Reclaimed Asphalt Pavement: Reclaimed Asphalt Pavement (RAP) may be used at the Contractor's option. If RAP is used, the Contractor shall provide the proposed mix design and quality control for all HMA that includes RAP, in accordance with the following requirements:

1. Contractor shall provide City with a mix design per California Test 384 for the proposed RAP HMA.
2. As part of City's evaluation of RAP HMA, Contractor and City shall perform bitumen ratio tests on at least six split samples of Contractor's RAP to establish correlation between respective binder ignition ovens.
3. RAP shall be processed from reclaimed Asphalt Concrete pavement only.
4. RAP pile(s) shall be separate from the stacker pile, not intermingled with other materials, and stored on smooth surfaces free from debris and organic material.
5. The project RAP pile shall be processed and mixed, identified, and of adequate quantity for the proposed project. "Live" piles shall not be permitted.
6. Contractor shall sample the RAP pile and determine the bitumen ratio (using same binder ignition oven used in #2 above) and provide the test results to the City at least one week prior to producing RAP HMA.
7. A minimum of three samples shall be tested for bitumen ratio for RAP pile of 1500 tons, or portion thereof.
8. RAP pile shall be mixed such that individual bitumen ratio test results of RAP pile so not vary more than +/- 0.5%.
9. During RAP HMA production, RAP shall be sampled by the Contractor off of the belt (into the batch plant), per method established by the City, and samples provided to the City.
10. Bitumen ratio of RAP sampled off of the belt shall be 4.0% minimum, as determined by City binder ignition oven. City shall select binder content for RAP HMA mix per Specifications.

11. RAP content shall be no more than 20% by dry aggregate mass in the HMA. If proposing a change in the RAP content, the Contractor shall notify the Engineer. If the content changes more than 5%, the Contractor shall submit a new mix design.
12. Moisture content of RAP pile shall be 4.0% maximum, and shall be tested the day prior to the day of paving and tested/monitored during each day of HMA production.
13. RAP pile(s) shall be protected from exposure to moisture.
14. RAP HMA shall comply with all the specifications for HMA.
15. If batch mixing is used, RAP shall be kept separate from the virgin aggregate until both ingredients enter the weigh hopper or pugmill. After introduction to the pugmill and before asphalt binder is added, the mixing time for the virgin aggregate and RAP shall not be less than five seconds. After asphalt binder is added, the mixing time shall not be less than 30 seconds.
16. If continuous mixing is used, the RAP shall be protected from direct contact with the burner flame with a device such as a shield, separator, or second drum.
17. If any of the above criteria are not satisfied, or if the RAP HMA test result determined by the City are inconsistent, RAP HMA production shall stop for City projects until the issue(s) are corrected.

39-1.08 Production

39-1.08A General: During production, with approval of the Engineer, you may adjust hot or cold feed proportion controls for virgin aggregate and RAP.

39-1.12 Smoothness

39-1.12A General: Determine HMA smoothness with a straightedge. The completed surfacing shall be thoroughly compacted, smooth and free from ruts, humps, depressions, or irregularities. Any ridges, indentations or other objectionable marks left in the HMA surface by blading or other equipment shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations, or other objectionable marks in the HMA shall be discontinued, and acceptable equipment shall be furnished by the Contractor.

39-3.02 Acceptance Criteria

39-3.02A Testing: The acceptance testing requirement for Sand Equivalent shall be 50 (minimum) for HMA surface and 45 (minimum) for HMA base. HMA shall meet the following requirements.

Aggregate Micro-Deval (ASTM D6928-10)[1]	Tensile Strength Ratio, TSR (ASTM D7870)[2]
≤16.0%	Not Required
16.1-18.0%	70 (minimum)
18.1-21.0%	80 (minimum)

[1] HMA with an aggregate Micro-Deval loss greater than 21.0% shall be removed and replaced at the Contractor's expense. In addition, no single source of HMA aggregate shall have a Micro-Deval loss greater than 21.0%.

[2] TSR testing shall be performed on re-compacted HMA (per ASTM D7870), obtained from field cores, and tested within 30 days of HMA placement. Specimens tested shall include 1 unconditioned sample, and 2 conditioned samples as follows:

a) 20.0-hour Adhesion cycle @ 60˚C
b) 3500 cycles @ 40 psi and 60˚C

A single TSR test shall not represent more than 750 tons of HMA.

HMA not meeting the above requirements shall be removed and replaced at the Contractor's expense.

39-3.04 Transporting, Spreading, and Compacting: Numbers of coverages.
Test sections shall be approved on the basis of the attainment of 93% relative compaction and a satisfactory surface condition following final rolling. The number of coverages required shall be the minimum number required to obtain 93% relative compaction. Relative density shall be the ratio of in-place density (ASTM Test Method D2950) to test maximum density (California Test 309, Method of Test for Determining Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt) determined during production paving.

The HMA may be cored during paving of the test sections, and the in-place density for each test section shall be the average of three core densities determined per California Test 308.

39-6 Payment: **Asphalt Concrete Surface Repair** shall be paid for at the contract price per **ton**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment and doing all work involved in locating underground utilities including, but not limited to, pot holing existing facilities (as needed), grinding, removal, recycling, and disposal of excavated material and placing HMA surface, including tack coat, and no additional allowance will be made therefor.

Full compensation for installing and removing temporary asphalt tapers shall be included in the contract price for asphalt concrete surface repair and no additional allowance will be made therefor.

Full compensation for removing existing asphalt concrete from top of gutters shall be included in the contract price for asphalt concrete surface repair and no additional allowance will be made therefor.

Full compensation for furnishing weigh master's certificates shall be considered as included in the contract price paid per ton for asphalt concrete surface repair and no additional allowance will be made therefore.

[Lab STD2010]

84 TRAFFIC STRIPES AND PAVEMENT MARKINGS

84-1.01 General: Attention is directed to Section 12 "Temporary Traffic Control" and Section 15 "Existing Facilities" of these Special Provisions. Traffic stripes and pavement markings shall conform to the applicable provisions of Section 84 of the Standard Specifications, The City Traffic Standards, and these Special Provisions and shall be placed on the same alignment and location that existed prior to removal except as directed by the Engineer.

Prior to existing striping removal, Contractor shall layout reference markings indicating location of all existing striping to be replaced in kind. Plans showing locations and details of existing striping are not available and Contractor shall be responsible for accurate replacement.

Contractor shall provide and install temporary retro-reflective pavement markings on the same day as the existing permanent markings are removed or destroyed, or as directed by the Engineer, and maintain them until the new permanent markings are in place in accordance with Section 15-2.02 "Removal Methods" of these Special Provisions.

Temporary striping on all ground surfaces shall be paint (white and/or yellow) with retro-reflective glass beads, temporary tape, or an approved equivalent and shall be installed the same day as the existing permanent striping is removed, or as directed by the Engineer. Temporary striping shall be maintained until new permanent striping is in place.

Temporary markers shall be removed or cut flush to the grade of the new pavement surface and to the satisfaction of the Engineer immediately prior to installing permanent markings.

Full compensation for temporary markings shall be considered as included in the price paid for various contract items of work involved and no additional compensation will be allowed therefor.

All thermoplastic, sprayed and extruded, shall be white except where yellow thermoplastic is designated by the Engineer. No additional compensation will be made for yellow thermoplastic.

Existing stripes and pavement markings to remain, which are damaged by the work, including oil tracking, shall be replaced at the Contractor's expense. This includes areas outside the immediate project limits.

Painted curbs which are damaged or replaced as part of the work shall be repainted to match existing conditions.

84-1.03E Application: Burbank Avenue and West Avenue double yellow centerline shall be installed by placing 4-inch yellow extruded Thermoplastic lines per 2010 Std. Plan A20A Detail 22.

The existing crosswalk on **Sebastopol Road at Mcminn Avenue**, and other existing crosswalks within the slurry limits, at locations without stop control (mid-block crossings) shall be re-installed as "Continental" style per CAMUTCD Section 3B.18, Figure 3B-19.

Existing Type I Through arrows within slurry limits shall be re-installed as 10' Type I Through arrows per Std. Plan A24A. Existing Type III Turn arrows (left and right) shall be re-installed as Type IV Turn arrows (left and right) per Std. Plan A24A.

Existing "Bike Lane" words and arrow within slurry limits shall be re-install as Bike Lane Symbols with Person, and Bike Lane Arrow per Std. Plan A24A and A24C.

Existing Speed Hump pavement markings within slurry limits shall be re-installed per MUTCD Section 3B, Figure 3B-29 Option A, and shall include Advance Warning markings per Figure 3B-31.

Existing Green Bike Lane pavement markings within Sebastopol Road slurry limits shall be re-installed per the manufacturer recommendations. Green Bike Lane Markings shall meet requirements of FHWA Interim Approval IA-14 and Chromaticity Requirements for Green-Colored Pavement as outlined in FHWA Interpretation Letter 9(09)-86(I). Green Bike Lane Markings shall be pre-formed thermoplastic with a minimum thickness of 90mil and skid resistance of greater than 45 BPN when tested according to ASTM E 303. Green Bike Lane Markings shall be installed in 4 foot by 3-foot rectangles, centered within the dashed bike lane markings, with the 4-foot dimension perpendicular to the direction of travel and the 3-foot dimension parallel to the direction of travel.

84-2.03B Extruded Thermoplastic: 12-Inch Thermoplastic Crosswalk, 8-Inch Channelizing Line, Thermoplastic Double Yellow Centerline, Thermoplastic Legends and Symbols, and Thermoplastic Turn Arrows shall be extruded thermoplastic. Extruded thermoplastic material shall be PTH-02ALKYD. No additional compensation will be made for yellow thermoplastic.

Thermoplastic pavement marking legends are not required to be enhanced wet-night visibility and payment will be determined by the actual area of pavement markings applied.

84-2.03C Sprayable Thermoplastic: 6-Inch Bike Lane Marking and 4-Inch Edge Line Marking shall be sprayed white thermoplastic with enhanced wet-night visibility per 2018 Standard Specification Section 84-2.03(2)(e).

At the Engineer's discretion, within 3-7 days of applying a thermoplastic traffic stripe or pavement marking with enhanced wet-night visibility, Contractor shall test the retroreflectivity using a reflectometer in the presence of the Engineer under ASTM E1710. For continuous lines, reflectance measurements must be made at approximately 20 feet intervals. For skip lines, measurements must be taken at two random locations on each skip. Contractor shall provide all equipment necessary to conduct field tests.

84-2.03D Measurement: The quantity of thermoplastic traffic stripes (Enhanced Wet-Night Visibility) to be paid for will be determined by measuring the length of traffic stripes applied. No deductions will be made for gaps in traffic striping. A 4-inch, 6-inch, and 8-inch traffic stripe is measured as one traffic stripe.

Thermoplastic double yellow centerline, 2010 Std. Plan A20A-Detail 22 quantities will be measured along the center of the detail in place and measured as one traffic stripe. Pavement markers shall be included in the paid contract unit quantities for Raised Pavement Markers, Reflective.

84-2.04 Payment: **Thermoplastic Arrows, Symbols, Words,** including Hump and Advance Hump pavement markings, will be paid for at the contract price per **square foot**, which price shall include furnishing all thermoplastic pavement marking material, glass beads and furnishing all equipment, tools, and labor, and doing all the work involved as herein specified, including eradication of existing traffic stripes and pavement markings, temporary traffic stripes and pavement markings and replacement of damaged stripes and markings, and no additional allowance will be made therefor.

Thermoplastic Green Bike Lane, and 12-Inch Thermoplastic will be paid for at the contract price per **square foot**, which price shall include furnishing all thermoplastic pavement marking material, glass beads and furnishing all equipment, tools, and labor, and doing all the work involved as herein specified, including eradication of existing traffic stripes and pavement

markings, temporary traffic stripes and pavement markings and replacement of damaged stripes and markings, and no additional allowance will be made therefor.

8-Inch Thermoplastic, 6-Inch Sprayed Thermoplastic, 4-Inch Sprayed Thermoplastic, and Thermoplastic Double Yellow Centerline will be paid for at the contract price per **linear foot** which price shall include furnishing all thermoplastic pavement marking material, glass beads, and furnishing all equipment, tools, and labor, and doing all the work involved as herein specified, including eradication of existing traffic stripes and pavement markings, temporary traffic stripes and pavement markings and replacement of damaged stripes and markings, and no additional allowance will be made therefor.

85 PAVEMENT MARKERS

85-1.01 General: Raised pavement markers shall be placed at the same locations that existed prior to removal except as directed by the Engineer and in accordance with the applicable provisions of Section 85 of the Standard Specifications, these Special Provisions, and the City of Santa Rosa Traffic Standards. Attention is directed to Section 15 "Existing Facilities" of these Special Provisions.

85-1.02 Materials: All raised pavement markers (RPMs) shall conform to the most current State Specifications.

85-1.02B Nonreflective Pavement Markers: All nonreflective pavement markers shall be ceramic.

85-1.02C Retroreflective Pavement Markers: Blue reflective raised pavement markers are to be placed per City STD 857 for each fire hydrant within the construction limits of the project. Where a hydrant, whether existing or new, is located at the corner of two streets, a blue RPM shall be placed in each street.

85-1.03 Construction: Existing raised pavement markers to remain, which are damaged by Contractor, shall be replaced as determined by the Engineer, at Contractor's expense. This includes areas outside the immediate project limits.

Existing raised pavement markers shall be removed, temporarily replaced, and maintained in accordance with Section 15-2.02 "Removal Methods".

Contractor shall provide, install, and maintain temporary markers on the same day that the existing permanent markers are removed, or as directed by the Engineer, and maintain this delineation until new permanent markers are in place. Temporary markers on non-ground surfaces shall be plastic adhesive retroreflective delineators.

Temporary markers shall be removed or cut flush to the grade of the new pavement surface and to the satisfaction of the Engineer immediately prior to installing permanent markers.

Existing raised pavement markers conflicting with the proposed striping shall be removed immediately prior to placement of new markers.

Divets left in the pavement due to the removal of raised pavement markers shall be filled with enough adhesive to replace any asphalt which comes off with the removal of the pavement marker, leaving a level driving surface.

85-1.04 Payment: **Pavement Markers**, **Reflective** and **Pavement Markers, Nonreflective**, shall be paid for at the contract unit price **each**, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in placing raised pavement markers, complete in place, including removing existing pavement markers, temporary pavement markers, and adhesives, and no additional allowance will be made therefor.

111 TREE SURGERY

111-1.01 General: Tree pruning and trimming shall be consistent with American National Standards Institute (ANSI) A300-1995, "Tree, Shrub and Other Woody Plant Maintenance Standard Practices" and "Tree-pruning Guidelines" published by the International Society of Arboriculture (ISBN 1-881956-07-5).

The successful bidder or the successful bidder's subcontractor must be able to demonstrate knowledge and abilities to perform the required work by possessing a valid California D49 Tree Service Contractor's License and possess the tools and equipment necessary to perform the required work.

The extent of pruning and trimming required shall be sufficient to allow for truck mounted mixer spreaders access during the placement of slurry. Truck mounted mixer spreaders will typically require unobstructed access from the lip of gutter or edge of pavement on the street to a height of 12 feet. In no case shall hand working of the slurry mixture be allowed in order to negate the need for tree trimming except as stated below.

No tree branches in excess of 6 inches in diameter are to be trimmed unless prior approval is granted by the Engineer. Tree branches in excess of 6 inches in diameter shall be marked in the field by you for approval by the Engineer.

Contractor shall provide all safety devices, traffic control, and be totally responsible for the safe execution of all required tree work.

Attention is directed to Section 7-1.03A "Maintaining Traffic" and Section 12-4.02 "Closure Requirements" of these Special Provisions.

All debris from tree pruning and trimming shall become your property and shall be disposed of by you at a site away from the work area.

Attention is directed to Section 5-1.36A "Property and Facility Preservation" of these Special Provisions.

111-1.06 Payment: Tree Trimming and Pruning will be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in tree trimming and pruning, including disposal of any tree trimming and pruning debris, as specified herein, and no additional allowance will be made therefor.

[Revision: 11/6/14CDA STD2010]

121 NOTIFICATION

121-1.01: Contractor shall notify the Engineer of any work to be performed on any given workday either on the afternoon of the prior working day or before 8:30 a.m. on the given working day. Any work completed for which the Engineer has not received prior notification of its scheduling MAY NOT BE ACCEPTED FOR PAYMENT.

121-1.02: Contractor shall notify in writing all residents and business owners 2 weeks in advance of any construction work on their street or in front of their homes or businesses. Contractor shall notify what type of work will be taking place, at what time, how long, and the potential impacts it will have on them. The notice shall also contain a map of the slurry sealing sequence detailing dates and times of each portion of roadway to be sealed. A copy of the proposed notification and maps shall be submitted to the Engineer prior to distribution for review and approval.

Seventy-two (72) hours prior to slurry placement, Contractor shall follow up the initial 2 week notification by placing door hangers at the residences and businesses on the affected streets, including each individual apartment in multi-dwelling units, stating what type of work is taking place, what time the work will begin, how long it will take, when, where, and how parking will be restricted, and the potential impacts it will have. A copy of the proposed notification shall be submitted to the Engineer prior to distribution for review and approval.

If the work is not completed on the day scheduled, Contractor shall re-notify and re-post the affected streets as stated above. All notices or correspondence shall be approved by the Engineer.

See Section 12-4.02 “Closure Requirements” of these Special Provisions for additional requirements.

121-3.01 Payment: Full compensation for conforming to the provisions of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

[Version: 10/13/14-CDA STD2010]

124 MATERIAL RECYCLING

124-1.01 Description: The Contractor shall dispose of all Portland cement concrete and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials. The Contractor shall provide receipts verifying delivery and approximate quantity (in tons) of the material delivered to a material recycler.

All other excess materials from the project shall become the property of the Contractor and shall be disposed of by him, at his expense.

124-1.02 Payment: Full compensation for material recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

CITY OF SANTA ROSA

STATE OF CALIFORNIA

ROSELAND PAVEMENT MAINTENANCE-2021

The work to be performed and referred to herein is in the City of Santa Rosa, California and consists of improvements to be constructed in accordance with the provisions of the Invitation for Bids, containing the Notice to Bidders, the Special Provisions, the Project Plan(s), the Bid Forms and the Contract, all of which are by reference incorporated herein, and each Addendum, if any is issued, to any of the above which is also incorporated by reference herein.

TO THE AWARD AUTHORITY OF THE CITY OF SANTA ROSA

The undersigned, as bidder, declares that the only person or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any other person, firm, or corporation; that Contractor has carefully examined the Project Plans, Invitation for Bids and conditions therefor, and is familiar with all bid requirements, that Contractor has examined this Contract and the provisions incorporated by reference herein, and Contractor hereby proposes, and agrees that if its bid is accepted by the City, Contractor will provide all necessary machinery, tools, apparatuses, and other means of construction, and to do all the work and furnish all the materials and services required to complete the construction in accordance with the Contract, the Special Provisions, the Project Plan(s), and Addenda to any of the above as incorporated by reference, in the time stated herein, for the unit prices and/or lump sum prices as follows:

CITY OF SANTA ROSA
C02345 ROSELAND PAVEMENT MAINTENANCE-2021
UNIT PRICE SCHEDULE

Bidder Name: _____

Item No.	Description	Quantity	Units	Unit Price	Total Price
1	TRAFFIC CONTROL	1	LS	$_____	$_____
2	WATER POLLUTION CONTROL	1	LS	$_____	$_____
3	PREPARATION FOR HIGH VOLUME TRAFFIC SLURRY SEAL	907,675	SF	$_____	$_____
4	HIGH VOLUME TRAFFIC SLURRY SEAL	980	TON	$_____	$_____
5	ASPHALT CONCRETE SURFACE REPAIR	660	TON	$_____	$_____
6	THERMOPLASTIC ARROWS, SYMBOLS, WORDS	3,815	SF	$_____	$_____
7	THERMOPLASTIC GREEN BIKE LANE	432	SF	$_____	$_____
8	12-INCH THERMOPLASTIC	3,730	LF	$_____	$_____
9	8-INCH THERMOPLASTIC	1,220	LF	$_____	$_____
10	6-INCH SPRAYED THERMOPLASTIC	8,345	LF	$_____	$_____
11	4-INCH SPRAYED THERMOPLASTIC	4,295	LF	$_____	$_____
12	THERMOPLASTIC DOUBLE YELLOW CENTERLINE	6,120	LF	$_____	$_____
13	PAVEMENT MARKERS, REFLECTIVE	875	EA	$_____	$_____
14	PAVEMENT MARKERS, NON-REFLECTIVE	4,135	EA	$_____	$_____
15	TREE TRIMMING AND PRUNING	1	LS	$_____	$_____
	GRAND TOTAL BID				**$**_____

In the case of any discrepancy between the unit price and the total set forth for the item, the unit price shall prevail; provided, however, that if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any reason, or is omitted, or in the case of lump sum items, is not the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

1. As to lump sum items, the amount set forth in the "Total" column shall be the unit price;

2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

The Total Base Bid shall be the sum of the "Total" column. In case of discrepancy between the sum of the "Total" column and the amount entered as Total Base Bid, the sum of the "Total" column shall prevail. The bid comparison will be based on the sum of the "Total" column for each bidder.

If this Contract Bid is accepted by the City and the undersigned fails to execute the Contract and to give all the bonds required under the Contract, with a surety satisfactory to the Award Authority of the City of Santa Rosa, within ten calendar days after bidder has received the Notice of Award from the Engineer, then the Award Authority may, at its option, determine that the bidder has abandoned the Contract, and thereupon this bid and the acceptance thereof shall be null and void, and the forfeiture of the security accompanying this bid shall be in accordance with California Public Contract Code section 20172.

The undersigned understands and agrees that the City is not responsible for any error or omissions on the part of the undersigned in making this bid.

The bidder to whom the Contract is awarded agrees to execute the Contract in favor of the City, in the form attached, and to deliver any and all required bond(s) and insurance certificates within ten calendar days from the date of Contractor's receipt of the Notice of Award. Following the award of the Contract, Contractor shall commence work within ten calendar days from the day authorized in the Notice to Proceed and diligently prosecute the same to completion in accordance with Section 8-1.04.

LIST OF SUBCONTRACTORS

NAME OF BIDDER: _____

The following is a list of each subcontractor who will perform work or labor or render services to the undersigned for the construction of the project in an amount in excess of ½ of 1% of the total amount of this bid.

The undersigned agrees that any portion of the work in excess of ½ of 1% of the total amount of this bid and for which no subcontractor is designated herein will be performed by the undersigned.

SUBCONTRACTOR NAME	SUBCONTRACTOR LICENSE NUMBER	SUBCONTRACTOR DIR REGISTRATION NUMBER	SUBCONTRACTOR BUSINESS ADDRESS	DESCRIPTION OF WORK (ITEM NO.)

LIST OF PREVIOUS SIMILAR JOBS

NAME OF BIDDER: _____

NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

NOTE: The above Noncollusion Declaration is part of the Contract Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Noncollusion Declaration.

BID BOND AFFIDAVIT AND BIDDER'S SIGNATURE PAGE

Accompanying this bid is a guaranty in the form of (Notice: Insert the words "cash $," "Cashier's Check," "Certified Check," or "Bidder's Bond" as the case may be):

_____

in an amount equal to at least ten percent of the total of this bid.

The undersigned further agrees that if Contractor does not execute the Contract and deliver the necessary bonds to the City within the period of time specified in this Invitation for Bids, the proceeds of the security accompanying this bid shall become the property of the City of Santa Rosa, California, and this bid and the acceptance thereof may, at the option of the City, be considered null and void.

The undersigned is licensed in accordance with an act providing for the registration of Contractors, License No. _____, Class _____, expiration date _____.

The undersigned in registered with the Department of Industrial Relations, Registration No. _____.

IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager of the corporation; if a partnership, state true name of partnership, also the names of all partners in the partnership; if the bidder is a sole proprietor, state the business name and the proprietor's name in full.

Secretary of State Business Entity Number: _____.

_____

_____

_____

_____

Business Address

_____

Telephone Number

I declare under penalty of perjury that the foregoing is true and correct.

BIDDER'S SIGNATURE: _____

TITLE: _____

DATE: _____

CONTRACT

CITY OF SANTA ROSA

CALIFORNIA

CONTRACT NO. C02345
ROSELAND PAVEMENT MAINTENANCE-2021

This Contract is made and entered into as of _____, 2021 at Santa Rosa, California, between the City of Santa Rosa ("City") and _____ of _____ ("Contractor").

ARTICLE I - For and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the required bonds hereunto annexed, Contractor agrees that for the benefit of City, at its own cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the Special Provisions to be furnished by City, necessary to construct and complete the work herein described in a good, workmanlike, and substantial manner. The work embraced herein shall be done in accordance with the Standard Specifications of the State of California Department of Transportation, dated 2010, insofar as the same may apply (Standard Specifications); in accordance with the City of Santa Rosa Construction Specifications for Public Improvements (City Specifications); in accordance with the City of Santa Rosa Design and Construction Standards, (City Standards); in accordance with the State of California Department of Transportation Standard Plans, dated 2010 (Standard Plans), (collectively, "Contract Documents") and in accordance with the Special Provisions hereinabove set forth, all of which are hereby incorporated into and made part of this Contract.

ARTICLE II - Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and doing all the work contemplated and embraced in this Contract; also for all loss or damages arising out of the nature of the work aforesaid, or from the acts of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by City and for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work, and the whole thereof in the manner and according to the Project Plans and Invitation for Bids therefor, and the requirements of the Engineer under them to wit:

ITEM NUMBER	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
			$ _____	$ _____

TOTAL BASE BID (SUM OF "TOTAL" COLUMN) $ _____

BID ITEMS IN THIS SECTION WILL BE INSERTED UPON AWARD OF THE CONTRACT AND SHALL BE THE SAME AS THOSE BID UPON.

ARTICLE III - City and Contractor hereby promise and agree that Contractor shall provide the materials and do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and City hereby agrees to pay for the same at the time, in the manner, and upon the conditions set forth; and the parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein stated.

ARTICLE IV - By execution of this Contract, Contractor hereby represents and certifies that Contractor is aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor hereby agrees to comply with such provisions before commencing the performance of the work of this Contract.

ARTICLE V - It is further expressly agreed by and between the parties hereto that the Invitation for Bids, containing the Notice to Bidders including any required Bonds, the Contract Documents, and any Addenda are all essential parts of this Contract and are specially referred to and by such reference made a part hereof. In the event of any conflict in the provisions thereof, the terms of said documents shall control each over the other, in the following order:

1. Special Provisions
2. Project Plans
3. City Standards
4. City Specifications
5. Standard Specifications
6. Standard Plans

ARTICLE VI - Contractor agrees to commence work pursuant to this Contract within ten calendar days from the date authorized in the Notice to Proceed and to diligently prosecute the same to completion in accordance with Section 8-1.04C of the Special Provisions.

This Contract shall not be transferred or assigned without the prior written consent of City, which may be withheld by City in its sole and absolute discretion.

If Contractor is a corporation, two corporate officers of Contractor, one from each of the following two groups shall execute this Contract: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The name and title of the corporate officers shall be printed under the signature.

In witness whereof, the parties hereto have executed this Contract as of the date first written above.

City:	**Contractor:**
City of Santa Rosa, a Municipal corporation	Name of Contractor, Type of entity
By: _____	By: _____
Title: _____	Name: _____
ATTEST: By: _____	Title: _____
Title: _____	By: _____
Approved as to form:	Name: _____
By: _____ Office of City Attorney	Title: _____