

Rocklin Unified School District

2615 Sierra Meadows Drive · Rocklin, CA 95677

Phone · (916) 624-2428 Fax · (916) 624-7246



Roger Stock, Superintendent
Jennifer Stahlheber, Deputy Superintendent Business & Operation

Tony Limoges, Associate Superintendent, Human Resources
Marty Flowers, Associate Superintendent, Secondary Education
Bill MacDonald, Associate Superintendent, Elementary Education

INVITATION FOR BID

PROJECT:

Summer 2024 Asphalt Projects

Mandatory Site Walk: January 23, 2024, 10:00 AM

Granite Oaks Middle School, 2600 Wyckford Blvd, Rocklin, CA 95765

Bid Due Date: February 13, 2024, By 2:00 PM

Date: January 11, 2024

From: Rocklin Unified School District
2615 Sierra Meadows Drive
Rocklin, CA 95677
Mike Stemple – Purchasing & Contract Services Manager

Board Members: Tiffany Saathoff · Rachelle Price · Dereck Counter · Julie Hupp · Michelle Sutherland

Notice to Bidders:

Notice is hereby given that the Rocklin Unified School District, of Placer County, California, herein referred to as Owner, will receive sealed proposals at the **District Office, located at 2615 Sierra Meadows Drive, Rocklin, CA 95677** until **February 13, 2024, at 2 PM**, at which time they shall be opened and publicly read, for **Summer 2024 Asphalt Projects**. After the scheduled closing time set for receipt of bids, bids may not then be withdrawn for a period of ninety (90) calendar days from and after said closing time, except as otherwise provided in the California Public Contract Code.

In accordance with the provisions of Section 1770 and 1773 of the Labor Code, Owner has obtained from the Director of the Department of Industrial Relations, the general prevailing rate of wages applicable to the work to be done. These rates are set forth in a schedule located at **the County Office of Education**. Said schedule is available to any interested party on request. The Contractor shall obtain and post a copy at each job site.

DIR Requirement: Contractor/Subcontractor Registration and Labor Compliance Monitoring and Enforcement. Except as provided in Labor Code §1771.1(a), no Contractor or Subcontractor may be listed on a bid proposal for a public works project submitted on or after March 1, 2015, or perform work on a public works contract award on or after April 1, 2015, unless registered with the Department of Industrial Relations pursuant to California Labor Code §1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. (Labor Code § 1771.4.).

Each bid must conform to the requirements of the Drawings and Specifications, and other documents comprising the Bid Documents. Inquiries regarding the documents and for obtaining the Bid Documents can be made by contacting Mike Stemple, Purchasing and Contract Services Manager at mstemple@rocklinusd.org or through the District's plan room link <http://publicpurchase.com>.

There will be a pre-bid conference on January 23, 2024, at 10 AM at Granite Oaks Middle School located at 2600 Wyckford Blvd, Rocklin CA 95765, and other sites. Attendance at the pre-bid conference by bidders is mandatory. Sign-in at the front office is required. The walk will start at the front office.

No bid will be considered unless it is made on a form provided by the District and **accompanied by Cashier's Check or Bidder's Bond for 10% of the total amount of the bid including Additive Alternates**, made payable to the Owner. The above-mentioned check or bid bond shall be given as a guarantee that the bidder shall execute the Contract, if awarded to him, in conformity with the Contract Documents. Each bid must be **submitted with a fully completed Non-collusion Affidavit** as required by Public Contract Code Section 7106.

In accordance with Section 20103.8 of the Public Contract Code of the State of California, the determination of the low bidder shall be based on the Base Bid amount, without consideration of Alternates.

Within ten (10) days after notification of the Award of Contract, the successful bidder or bidders will be required to furnish, simultaneously with execution of the Contract, a **Labor and Material Payment Bond** in an amount equal to One Hundred Percent (100%) of the Contract amount and a **Faithful Performance Bond** in an amount equal to one hundred percent (100%) of the Contract amount. Said bonds shall be secured from a Surety Company satisfactory to the Owner and with a Best's rating of no less than A-XI. The Bid Bond, Faithful Performance Bond, and the Labor and Materials Bond must be issued by an Admitted Surety, and insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year.

Pursuant to Section 22300 of the Public Contract Code of the State of California, the contract will contain provisions permitting the successful bidder to substitute securities for any moneys withheld by the District to ensure performance under the Contract.

Classification of Contractor's License for this work shall be Class **A, General Engineering**.

The Owner reserves the right to reject any and all bids and/or waive any irregularities or informalities in the bidding.

Advertising Dates:
January 11, 2024
January 18, 2024

Clerk of the Governing Board of
Rocklin Unified School District Placer County, CA
Address of the Clerk:
2615 Sierra Meadows Drive, Rocklin, CA 95677

INSTRUCTIONS FOR BIDDERS

1. **Review of Plans and Specifications.** Each bidder, at its own expense and prior to submitting its bid, shall thoroughly review and become familiar with all of the plans and specifications for the Project. A bidder is required to review the plans and specifications only in its capacity as a contractor, not as a licensed design professional. Each bidder must report to the District any errors or omissions in the plans and specifications revealed through such review.

2. **Examination of Project Site and Contract Documents.** Each bidder, at its own expense and prior to submitting its bid, shall visit the site of the Project and become fully acquainted with the conditions relating to the construction and labor so that the bidder fully understands the facilities, difficulties, and restrictions attending the execution of the work under the contract. Subject to District approval and evidence satisfactory to the District of adequate insurance coverage, any bidder that has attended the Mandatory Pre-Bid Conference specified in the Notice Inviting Bids, at its sole cost, may subsequently conduct additional site visits or inspections. These Instructions for Bidders do not constitute a comprehensive statement of all requirements applicable to the Project; therefore, each bidder shall thoroughly examine and become familiar with the drawings, specifications, form of agreement, forms of the required bonds, insurance endorsements and other “Contract Documents” defined in the Form of Agreement. A bidder’s failure to obtain and/or thoroughly examine any drawing, specification, form, instrument, addendum or other contract document, or to visit the site and become acquainted with conditions there- existing, shall not relieve the bidder from any obligations with respect to its bid or the contract. The submission of a bid shall be taken as a representation and warranty by the bidder that it has complied with the requirements of this Section. At no time after submitting a bid may the bidder dispute, complain, or assert that there were any misunderstandings with regard to the nature or amount of work to be done in connection with the Project.

3. **Interpretation of Contract Documents.** If a bidder is in doubt as to the true meaning of any part of the Contract Documents or finds discrepancies in or omissions from the drawings and specifications, the bidder may submit to the District a written request for an interpretation or correction thereof. The bidder submitting the request shall be responsible for its prompt delivery. Prior to the opening of bids, interpretations or corrections of the Contract Documents will be made only by addendum duly issued by the architect. Copies of each addendum will be mailed or delivered to each contractor that has obtained a copy of the bid documents. No person is authorized to provide any oral interpretation of any provision in the Contract Documents, and no oral interpretation shall be binding on the District. If discrepancies in or conflicts between the drawings and specifications are not addressed in any addenda, the bidder shall include in its bid the methods of construction and/or materials resulting in the higher bid amount.

4. **Ethics in Bidding.** The District expects each bidder to maintain high ethical standards with respect to bidding on the Project. Prior to the award of a contract for the Project, no bidder shall disclose the amount of any prospective subcontractor’s bid or proposal, or any element thereof, to any other prospective subcontractor. Bidders shall not engage in or permit the unethical and unfair practices commonly referred to as bid shopping (e.g., the bidder uses a subcontractor’s proposal in attempts to obtain a lower-cost proposal from another subcontractor) and bid peddling (e.g., a subcontractor attempts to obtain a job by offering to work for less than the amount specified in another subcontractor’s proposal). If the District determines prior to opening of bids that any bidder has violated any of the foregoing requirements or any other prohibitions set forth in the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 *et seq.*), the District may reject the bidder’s bid as non-responsive and report the bidder’s actions to the Contractors State License Board.

5. **Contractor Licensing.** Each bidder must be properly licensed in the State of California and “in good standing” at the time of submitting its bid to the District. Failure to satisfy this requirement shall result in the bidder being deemed non-responsive and the bidder will be disqualified from

work on the Project. Each bidder must clearly specify its California contractor's license number where indicated in the bid form. The bidder to which the District awards a contract for the Project must maintain the required license(s) specified in the Notice Inviting Bids throughout the duration of the Project.

6. **Listing Subcontractors.** As required pursuant to the Subletting and Subcontracting Fair Practices Act, each bidder shall submit with its bid a list of the names, license numbers, DIR registration numbers, if the project is a public works project in excess of \$25,000 or a maintenance project in excess of \$15,000, and locations of the places of business of each subcontractor that will perform work or labor or render service to the bidder in or about the Project, or that, under subcontract to the bidder, will specially fabricate and install a portion of the work, in an amount in excess of one-half of 1 percent of the total amount of the bidder's bid. A bidder may not list more than one subcontractor for any one portion of the work. A bidder that fails to list a subcontractor for any portion of the work represents that it is fully qualified to and shall perform such work using its own forces. If the bid documents require the bidder to submit alternate bids and the bidder intends to use different or additional subcontractors for the alternates, the bidder must submit a separate list of subcontractors for each such alternate. A bidder shall submit the lists of subcontractors only on the form included in the bid documents.
7. **Use of Bid Form is Mandatory.** Each bid must be submitted on the Bid Form included in the bid documents. Changes in or additions to the Bid Form, recapitulations of the work for which the bid is submitted, alternative proposals, and other modifications of the Bid Form or any of the documents to be submitted with the bid are prohibited unless specifically called for in the Contract Documents.
8. **Preparing the Bid.** Bidders must fully and properly complete all information required to be included on the Bid Form. Amounts must be stated in both words and numerals where indicated. Prices, wording and notations must be in ink or typewritten. The signatures and/or initials of each person signing the bid and other documents to be submitted with the bid must be in permanent, preferably blue, ink.
9. **Correcting the Bid.** Bids may contain an erasure, interlineation, or other correction only if the correction does not result in any inconsistency or ambiguity and the correction is authenticated by affixing in the margin immediately opposite the correction the initials of the person or persons signing the bid. In the event of inconsistency between words and numerals, words shall govern over numerals.
 - (a) **Mandatory Forms to Include in Bid.** Each bidder shall complete and submit with its Bid Form each of the forms specified on the bid form, which are included in the bid documents. A bidder's failure to properly complete and submit any such mandatory form may render the bidder's bid non-responsive to the Notice Inviting Bids. Exhibit B.
10. **Signing the Bid and Other Required Forms.** The Bid Form, bonds, subcontractors lists, contractor's certificates, attachments to the Agreement Form, guarantees and other documents requiring an original signature of the bidder must be signed in permanent, preferably blue, ink by a person or persons duly authorized to sign the document. The District may reject as non-responsive any Bid Form containing a stamped or mechanically- printed signature. Depending on whether the bidder is an individual or the type of business entity, signatures must comply with the following:
 - (a) **Corporations:** If bidder is a corporation, each document shall set forth the legal name of the corporation and shall be signed by both the bidder's President and the bidder's Secretary or Assistant Secretary. Alternatively, the signature of other authorized officers or agents may be affixed to the document if the bidder has included with its bid a certified copy of the resolution of the corporate board of directors authorizing such officers or agents to sign the document. Such documents

shall include the title of each such signatory below the signature and shall bear the corporate seal.

- (b) **Limited Liability Companies:** If bidder is a limited liability company, each document shall set forth the true name of the company and the names of all members of the company, and all such members shall sign the document. Alternatively, the document may be signed by a managing member of the company if the bidder has included in its bid a certified copy of a statement of the limited liability company acknowledging the signatory as a managing member with authority to sign the document.
 - (c) **Partnerships:** If bidder is a partnership of any type, each document shall set forth the true name of the partnership and the names of all persons comprising the partnership, and all such persons shall sign the document. Alternatively, the document may be signed by a general partner of the partnership if the bidder has included in its bid a certified copy of a statement of the partnership acknowledging the signatory as a general partner with authority to sign the document.
 - (d) **Sole Proprietorships:** If the bidder is a sole proprietorship, each document must set forth the true name of the sole proprietorship and its owner, and such owner must sign the document. Alternatively, an agent of the owner may sign a document if the bidder has included in the bid a certified copy of a current and valid power-of-attorney authorizing the agent to sign the document.
 - (e) **Fictitious Names and Joint Ventures:** If the bidder is an entity using a fictitious business name or a joint venture of two or more other parties, documents must satisfy the requirements set forth above for signatures on behalf of corporations and partnerships, as applicable. The signature on any document signed on behalf of any entity using a fictitious business name must so indicate in the signature block. Documents submitted by parties acting as joint venturers must so indicate in the signature block and must be signed by or on behalf of each and every joint venturer.
11. **Sealing and Marking the Bid.** The completed Bid Form and all additional documents and other materials to be submitted with the bid in accordance with the Contract Documents shall be enclosed in a sealed envelope. The bidder shall plainly and clearly mark the outside of the envelope with the bidder's name, address, telephone number, bidder's contractor's license number and the bid package for which the bid is submitted. No other information shall be apparent on the outside of the envelope. The District may reject any bid if the outside of the envelope is improperly or incompletely marked.
 12. **Delivering the Bid.** For purposes of the Notice Inviting Bids and these Instructions for Bidders, any reference to the "Bid Deadline" shall mean the date and time specified as the Bid Deadline in the Notice Inviting Bids and any authorized extension thereto. Bids must be delivered to and received by the District at the location specified as the place for submitting bids and by the Bid Deadline. The clock located in the District Bond Trailer and designated as the official clock for bidding purposes shall be used in determining whether bids have been timely delivered and received by the District. Each bidder is solely responsible for ensuring that its bid is timely delivered to and received by the District. At no time will District telephones or facsimile machines be available for use by bidders. Any bid received by the District after the Bid Deadline will be returned to the bidder unopened.
 13. **Submitting Bids for Multiple Bid Categories.** If the District is seeking bids for other bid categories related to the Project, bidders may submit bids for more than one bid category. However, the bid for each bid category must be complete unto itself and shall not be dependent on the award,

price or some other conditional provision relative to any other separate bid category. No combination bids of any type will be accepted unless expressly permitted in the bid documents.

14. **Interest in More Than One Bid and Unqualified Bidders.** No person or entity shall submit or have any interest in more than one prime bid for the same work except to the extent the bid documents expressly call for alternate bids. The District will not accept more than one bid for the same work from any person or entity, under the same or different names. A reasonable belief by the District that any person or entity has an interest in more than one bid or has submitted more than one bid for the same work on the Project may result in the District rejecting all bids in which the bidder has an interest. A person or entity that has submitted a sub-bid or proposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a sub-bid or proposal to other bidders, but the person, firm or corporation is prohibited from submitting a prime bid for the same bid category. The District will not accept any combination bids unless expressly permitted in the bid documents. No person or business entity that has participated in the preparation of any contract specifications shall be permitted to bid on the Project, and any such bid received by the District shall be deemed non-responsive.

15. **Modifying a Bid.** Prior to the Bid Deadline, a bidder may modify its bid by submitting the written modification to the District, in a sealed envelope, which must be received by the District not later than the Bid Deadline. The envelope shall be marked in the same manner as provided in these Instructions for Bidders for the original bid, but shall also include the words “Bid Modification” on the outside of the envelope. The District may reject any modified bid if the modification is not received by the District prior to the Bid Deadline or if it creates an ambiguity or inconsistency, including, without limitation, if the modified bid is unintelligible. In lieu of submitting a modification, a bidder may withdraw its original bid in accordance with these Instructions for Bidders and submit a new bid for the Project, in which case the outside of the sealed envelope shall be marked with the words “Superseding Bid” in addition to the other required information. The bidder must submit any modification or superseding bid in writing to the District via personal or other delivery. The District will not accept oral modifications or superseding bids and will not accept any modifications or superseding bids sent via facsimile or electronic transmission. Any modification or superseding bid must be delivered to and received by the District prior to the Bid Deadline.

16. **Withdrawing a Bid.** A bidder may withdraw its bid at any time prior to the Bid Deadline, either personally or by written request received by the District prior to the Bid Deadline. In such event, the District shall return the withdrawing bidder’s bid security upon request. Except as provided in Public Contract Code Section 5100 *et seq.*, in no event may a bidder withdraw its bid during the period after opening of bids that is specified in the Notice Inviting Bids.

17. **Requesting Substitution of Specified Item.** Unless the Contract Documents provide in any particular case that substitution is not permitted, if the Contract Documents call for any specific concern, material, product, thing or service, such specification shall be interpreted as if followed by the words “or equal.” Unless provided otherwise in the Contract Documents, a bidder may offer in place of any item specified in the plans, drawings or other Contract Documents (“Specified Item”) any material, process, article, *et cetera* that the bidder can demonstrate is materially equal or better in every respect to the Specified Item and that will completely accomplish the purpose of the Contract Documents. Requests for substitution must be made in writing on the Substitution Request form included in the bid documents or available from the District.

The bidder is solely responsible for establishing that a proposed substitution satisfies all requirements of the Contract Documents, including, without limitation, that the proposed substitute item is equal to or better than the Specified Item in all material respects. The District may at any time request any additional information regarding the proposed substitute item. The District, in consultation with the Architect and the Construction Manager as applicable, will decide whether to

approve a substitution based on the information provided by the bidder. The District has the sole discretion to determine whether a proposed substitute item is equal to or better than a Specified Item. Any request for substitution that is granted by the District shall be documented and processed by means of a Change Order after execution of the contract. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution. The bidder shall be responsible for and shall bear any and all risks, expenses and costs of delay arising from review or approval of a substitution by the DSA or other governmental agency.

SUBMISSION OF A SUBSTITUTION REQUEST AND SUBSTANTIATING DATA SHALL IN NO WAY OBLIGATE THE DISTRICT TO REVIEW THE REQUEST OR DATA PRIOR TO AWARD OF A CONTRACT FOR THE PROJECT. IF THE DISTRICT AWARDS A CONTRACT FOR THE PROJECT TO A BIDDER AND SUBSEQUENTLY REJECTS A SUBSTITUTION PROPOSED BY SUCH BIDDER, THE BIDDER MUST PROVIDE THE SPECIFIED ITEM IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AT NO ADDITIONAL COST TO THE DISTRICT.

18. **District Waiver of Bid Irregularities.** The District, in accordance with applicable law, may waive any minor irregularity or informality in any bid or in the bidding.
19. **District Rejection of Irregular Bids.** The District will reject as non-responsive to the Notice Inviting Bids any bids containing irregularities that are not minor irregularities, including, by way of example and not as a limitation, bids that are materially incomplete, bids submitted on forms that have been materially altered, and bids that include any additions or conditional or alternate bids not called for or permitted in the bid documents. In addition, the District may reject as non-responsive to the Notice Inviting Bids any bid in which the bid amounts are obviously unbalanced or inconsistent. The District may, but is not required to, seek information from any bidder that may resolve an ambiguity in the bidder's bid.
20. **District Rejection of Non-Responsive Bids.** If a bid fails to conform to requirements set forth in the Notice Inviting Bids, these Instructions For Bidders, or any of the other Contract Documents (including, without limitation, if the District determines that the bid is unintelligible, internally inconsistent, or ambiguous), the District may reject the bid as not responsive to the Notice Inviting Bids. The District may, but is not required to, seek information from any bidder that may resolve an ambiguity in the bidder's bid.
21. **Bidder Evidence of Responsibility.** In determining whether a bidder is a "responsible" bidder, the District will consider, among other possible factors, the financial standing and general competency of the bidder with respect to the work being bid. If the District is considering awarding a contract for the Project to a bidder, the bidder, within two business days of the District's request, shall provide reasonable evidence of the bidder's construction experience, current and anticipated workload, organization available for the performance of the contract, any terminations from projects prior to completion, references for public works, financial resources, surety and insurance claims experience, stop notice and other legal proceedings, and other factors pertinent to determining the responsibility of the bidder.
22. **District Award of Contract.** In its discretion, the Governing Board may award a contract for the Project to a responsive bidder, or the Governing Board may reject all bids and may (but is not required to) rebid the Project. If the Governing Board awards a contract for the Project, the award will be to the responsible and responsive bidder with the lowest bid from among the bidders responsive to the Notice Inviting Bids. If two or more responsive and responsible bidders have submitted the same low bid, the District shall determine the lowest bidder by means of a coin toss or some other random method.
23. **Bidder Execution of Contract.** The bidder to which the District awards a contract for the Project

shall **be sent a Preliminary Notice of Award and shall have ten (10)** calendar days after notification of the award to execute and deliver to the District the contract and all other documents required in accordance with the Contract Documents. If the bidder fails to execute and provide all such documents within that period, the bidder will forfeit the bid security submitted with its bid in accordance with the Notice Inviting Bids. In such event, the District may award the contract to the next lowest responsible and responsive bidder or release all bidders.

24. **Filing Bid Protests.** A bidder may protest the bidding process, another bid and/or the intended award of a contract for the Project only by filing a written protest with the District’s Deputy Superintendent of Business Services in accordance with the procedures set forth in this Section. The District will not consider any verbal protests (e.g., by telephone) or any protests sent by electronic mail (e-mail). In order for a protest to be valid and be considered by the District the protest must:
- (a) be filed not later than 4:00 p.m. on the fifth business day following the opening of bids;
 - (b) clearly identify the bidder on whose behalf the protest is being filed, together with the name, address and telephone number of the person representing the bidder for purposes of the protest;
 - (c) clearly identify the specific bidding process, bid, or award of contract being protested;
 - (d) clearly identify and describe in detail the specific basis or bases for the protest and all facts relevant thereto and in support thereof;
 - (e) clearly identify all references to the specific portions of all documents relevant to the protest;
 - (f) clearly identify and describe in detail all arguments in support of the protest, including, not as a limitation, citations to all legal authorities; and
 - (g) be submitted with all documentation that is relevant to and supports the basis or bases underlying the protest.

If a protest filed by a bidder does not comply with each and every one of the foregoing requirements, the District will reject the protest as invalid. If a bidder files a valid protest, the District shall review the protest and all relevant information and documents and will provide written decision to the protesting bidder. In response to a protest, the Governing Board may decline to award a contract, may award a contract to a bidder other than as previously intended, or may award a contract to a bidder as previously intended despite the protest. Such action by the Governing Board shall be a condition precedent to the filing of any claim or demand and to the initiation of any action (legal or equitable) or other proceeding arising from the matter(s) protested.

COMPLIANCE WITH THE FOREGOING REQUIREMENTS IS MANDATORY. Each bidder that desires to protest must file a protest in accordance with the foregoing requirements, and no bidder may rely on a protest by another bidder as a means of satisfying such requirements. Compliance with the foregoing requirements is the sole and exclusive means of protesting the bidding process, any bid, and/or the intended award of a contract for the Project, and failure to so comply shall be deemed and construed as a waiver of any and all rights the bidder may have to pursue a claim, demand or action based on the bidding, any bids, and/or any contract awarded for the Project.

25. **Public Works Project.** The Project is a “public work” and “public project” within the meaning of, and, therefore, is subject to, various provisions of the Public Contract Code, Labor Code, Civil Code, and other legal requirements applicable to public works and public projects. The Contract Documents include various provisions relating to public works and public projects as provided by law, and each bidder must thoroughly review and become familiar with the Contract Documents as described above in these Instructions for Bidders. However, the provisions of the Contract Documents are not comprehensive statements of all requirements of law applicable to public works and public projects, and each bidder so acknowledges by submitting a bid for the Project. In

addition, by submitting a bid for the Project, each bidder represents and warrants that it is familiar and knowledgeable with respect to all requirements of law applicable to public works and public projects generally and to the Project specifically.

26. **Subcontractor Eligibility and Licensing.** The bidder to which the District awards a contract for the Project shall in no event permit a subcontractor to perform any work in connection with the Project if that subcontractor is ineligible to work on a public works or public project. Each subcontractor that the bidder intends shall perform any work in connection with the Project must be licensed in accordance with law prior to commencing any work on the Project.
27. **Prevailing Wages.** The bidder to which the District awards a contract for the Project, and each of that bidder's subcontractors of any tier, shall be required to pay not less than the general prevailing rates of per-diem wages in the locality in which the work is to be performed for each craft or type of worker needed to execute the contract ("Prevailing Wages"). The successful bidder must retain copies of certified payrolls for a minimum of five years from the date of completion and submit the upon request of the District or its authorized agent. A copy of the per-diem rates of Prevailing Wages shall be posted at the site of the Project. Rates are available at <http://www.dir.ca.gov/dlsr/pwd/index.htm>
28. **Public Works Contractor Registration Certification.** Pursuant to Labor Code sections 1725.5 and 1771.1, if the Project is a public works project in excess of \$25,000 or a maintenance project in excess of \$15,000, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained therein. Failure to submit this form may render the Bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors Form.
29. **Apprenticeable Trades and Crafts.** Not later than two calendar days after receiving notice of the award of the contract for the Project, the bidder to which the District awards the contract must provide written notice to the District in regard to whether, as described in Labor Code Section 1777.5, workers in any apprenticeable trade or craft will be employed on the Project.
30. **Fingerprinting and Employee Background Checks.** In circumstances that may involve workers having more than limited contact with students, the District may require that all workers on the Project (including, without limitation, employees of the bidder and its subcontractors) undergo criminal-history background checks requiring submission of fingerprints to the Department of Justice. The District may impose other requirements designed to protect students regardless of whether it requires such criminal-history background checks. The bidder to which the District awards a contract for the Project shall be responsible for compliance with any and all such requirements by its own forces and by its subcontracted forces.
31. **Anti-Discrimination Policy.** It is a policy of the District that, in connection with any work performed under contract, there shall be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, or marital status. No bidder shall discriminate in violation of applicable law in preparing and submitting its bid for the Project. The bidder to which the District awards a contract for the Project will be required to comply with applicable federal and California laws prohibiting such discrimination and to require like compliance by any subcontractors employed on the Project by

such bidder.

32. **Project Duration and Liquidated Damages.** The bidder to which the District awards a contract for the Project must complete the Project in accordance with the Contract Documents and within the time period specified in the Special Conditions. Failure of such bidder to fully complete the Project within such time period, or to complete any portion thereof in accordance with any applicable schedule for the Project, may result in the District assessing liquidated damages against the Contractor as provided in the General Conditions.
33. **Construction Manager.** If the District uses a Construction Manager for the Project, the Construction Manager will be identified in the Special Conditions and the role of the Construction Manager will be as specified in detail in the General Conditions and is subject to provisions of the agreement between the District and the Construction Manager. The Construction Manager will be the District's representative during construction and close-out of the Project and will assist the District in the administration of the contract for the Project. In addition, the Construction Manager may assist the District with the bidding process for the Project. Communications from the District to bidders prior to award of a contract for the Project may be directed through the Construction Manager.
34. **Project Architect.** The Architect for the Project is identified in the Special Conditions, and the role of the Architect will be as specified in detail in the General Conditions and is subject to the provisions of the agreement between the District and the Architect. The Architect will be the District's representative during construction and close-out of the Project in accordance with Title 24 of the California Code of Regulations and provisions of the agreement between the District and the Architect. Communications from the District to bidders prior to award of a contract for the Project may be directed through the Architect.

Attachments and Exhibits

Exhibit A: Scope of Work

Exhibit B: Bid Documents

Exhibit C: Contract

Exhibit A- Scope of Work

Scope of Work. Contractor agrees to perform the work and to furnish all tools, equipment, apparatus, facilities, labor and material necessary to perform and complete in a good workmanlike manner, all parts of the work as called for in a manner designated in and in strict conformance with the scope of work set forth in Exhibit "A," attached hereto and incorporated herein ("Scope of Work") and the Contract Documents. It is understood and agreed that said tools, equipment, apparatus, facilities, labor and material shall be furnished and said work performed and completed as required in said Scope of Work under the direction and supervision of, and subject to the approval of the District's authorized representative. Contractor's Work shall also be consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Work. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Work, including a Business License, and that such licenses and approvals shall be maintained throughout the term of this Contract. As provided for in the indemnification provisions of this Contract, Contractor shall perform, at its own cost and expense and without reimbursement from the District, any work necessary to correct errors or omissions which are caused by Contractor's failure to comply with the standard of care provided for herein.

Items 1-6. Work will consist of crack fill, slurry seal, striping, painting, and curb repainting, in accordance with the engineering drawing/map provided. Please note there will be **no asphalt patch work** as indicated. Work is to begin when school is out of session starting June 10, 2024, and is to be completed by August 2, 2024, actual starting date/schedule will be approved by the district.

Six (6) site locations:

School Name	Address
Breen Elementary	2751 Breen Drive, Rocklin CA 95765
Sierra Elementary	6811 Camborne Way, Rocklin CA 95677
Granite Oaks Middle School	2600 Wyckford Blvd, Rocklin CA 95765
Spring View Middle School	5040 Fifth Street, Rocklin CA 95677
Victory High School	3250 Victory Drive, Rocklin CA 95765
District Office	2615 Sierra Meadows Drive, Rocklin CA 95677

Items 7- 14. Work will consist of crack fill blacktop only in accordance with crack fill instructions Work is to begin when school is out of session starting June 10, 2024, and is to be completed by August 2, 2024, actual starting date/schedule will be approved by the district.

Eight (8) site locations:

School Name	Address
Cobblestone Elementary	5740 Cobblestone Drive, Rocklin CA 95765
Parker Whitney Elementary	5145 Topaz Ave, Rocklin CA 95677
Ruhkala Elementary	6530 Turnstone Way, Rocklin CA 95765
Valley View Elementary	3000 Crest Drive, Rocklin CA 95765
Antelope Creek Elementary	6185 Springview Drive, Rocklin CA 95677
Rock Creek Elementary	2140 Collet Quarry Drive, Rocklin CA 95765
Rocklin Elementary	5025 Meyers Street, Rocklin CA 95677
Twin Oaks Elementary	2835 Club Drive, Rocklin CA95765

Crackfill Instructions

GENERAL APPLICATION OF EMULSIFIED ASPHALT CRACK SEAL

APPLICATION OF CRACKFILL AS REQUIRED TO INCLUDE BLACKTOP AREA ONLY/ PLAYGROUND. THE DISTRICT WILL COORDINATE ALL SITE ACCESS WITH BIDDER DAILY, OR AS REQUIRED.

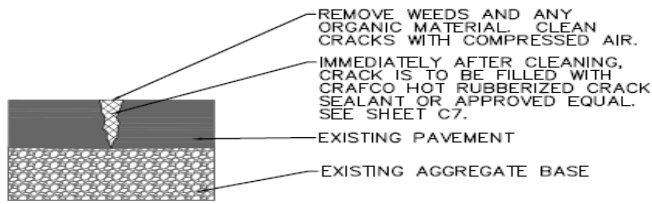
SEE CRACKFILL SPECIFICATION SHEET C-7 FOR ACCEPTABLE MATERIAL

THE DISTRICT HAS PROVIDED THE MAXIMUM LINEAR FEET (LFT) FOR EACH OF THE SITES, BIDDER IS RESPONSIBLE TO MAINTAIN AND LIMIT APPLICATION OF CRACKFILL TO THE MAXIMUM LFT FOR EACH SITE AND WILL NOT BE PAID FOR OVERAGES. THE DISTRICT REQUESTS THAT THE CONTRACTOR REVIEW EACH SITE AND MAP OUT A PLAN TO FILL THE LARGER WIDTH/ LONGEST CRACKS FIRST.

THIS WORK APPLIES TO ALL CRACKS AND JOINTS IN AND ADJACENT TO THE ASPHALT CONCRETE PAVEMENT. THE WORK CONSISTS OF CLEANING, STERILIZING WHERE WEEDS ARE PRESENT, FILLING WITH EMULSIFIED ASPHALT CRACK SEAL.

ROUTING OF PAVEMENT IS REQUIRED.

POLYMER MODIFIED ASPHALT PAVEMENT SEAL COAT



CRACK WIDTHS 1/4"-1"

NOTES:

1. CRACK WIDTHS LESS THAN 1/4" SHALL NOT BE SEALED.

ASPHALT CRACK SEAL WITH HOT RUBBERIZED SEALANT

MATERIALS.

CRACK SEAL SHALL BE AN EMULSIFIED MATERIAL THAT CAN BE READILY HANDLED AT AMBIENT TEMPERATURES, CAN BE STORED FOR PERIODS OF UP TO SIX MONTHS, AND IS MADE WITH BASE MATERIALS THAT WILL REMAIN DUCTILE WITH AGING AND PROVIDE RESILIENCY UNDER EXTREME CLIMATIC CONDITIONS.

THE SEALANT SHALL CONTAIN NO VOLATILE ORGANIC COMPOUNDS WHICH CONTRIBUTE TO AIR POLLUTION AND SHALL CONFORM TO THE REQUIREMENTS IN THE FOLLOWING TABLE:

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>REQUIREMENTS</u>
VISCOSITY @ 77 F (25 C), SFS	ASTM D-244-76	25-150
PUMPING STABILITY	GB METHOD (1)	PASS
5-DAY SETTLEMENT TEST, PERCENT	ASTM D-244-76	5.0 MAXIMUM
CEMENT MIXING TEST, PERCENT	ASTM D-244-76	2.0 MAXIMUM
SIEVE TEST, PERCENT	ASTM D-244-76	0.1 MAXIMUM
PARTICLE CHARGE TEST	ASTM D-244-76	POSITIVE
RESIDUE, PERCENT	ASTM D-244-76 (MOD) (3)	62 MINIMUM
TEST OF RESIDUE	ASTM D-244-76	
VISCOSITY AT 140 F (60 C), CS.	ASTM D-244-76	1000-4000

TESTING NOTES:

1. PUMPING STABILITY IS DETERMINED BY CHARGING 450 ML. OF EMULSION INTO A ONE-LITER BEAKER AND CIRCULATING EMULSION THROUGH A GEAR PUMP (ROPER 29 B22621) HAVING 1/4 INCH INLET AND OUTLET. THE EMULSION PASSES IF THERE IS NO SIGNIFICANT OIL SEPARATION AFTER CIRCULATING TEN MINUTES.
2. TEST PROCEDURE IDENTICAL WITH ASTM D-244 EXCEPT THAT DISTILLED WATER SHALL BE USED IN PLACE OF TWO PERCENT SODIUM OLEATE SOLUTION.
3. ASTM D-244 EVAPORATION TEST FOR PERCENT OF RESIDUE IS MODIFIED BY HEATING A 50 GRAM SAMPLE TO 300 F (149 C) UNTIL FOAMING CEASES, THEN COOLING IMMEDIATELY AND CALCULATING RESULTS. THE VENDOR SHALL FURNISH CERTIFICATION THAT THE CRACK SEALANT MATERIAL COMPLIES WITH THE ABOVE REQUIREMENTS. SAND COVER SHALL BE FREE FROM CLAY OR ORGANIC

MATERIAL AND SHALL BE OF SUCH SIZE THAT FROM 90 PERCENT TO 100 PERCENT WILL PASS A NO. 4 SIEVE AND NOT MORE THAN 10 PERCENT WILL PASS A NO. 200 SIEVE.

APPLICATION OF CRACKFILL

IMMEDIATELY BEFORE APPLYING THE SEALANT, CRACKS AND JOINTS SHALL BE CLEANED BY MECHANICAL OR HAND METHODS FOLLOWED BY BLAST CLEANING WITH HIGH-PRESSURE AIR JETS TO REMOVE ALL RESIDUE AND FOREIGN MATERIAL TO A MINIMUM DEPTH OF THREE-QUARTER (3/4) INCH. WATER JETS SHALL NOT BE ALLOWED. CRACK SURFACES SHALL BE SURFACE DRY AT THE TIME THE SEALANT IS APPLIED.

CRACK SEALANT MATERIAL MAY BE SPREAD WITH ANY TYPE NOZZLE OR DEVICE THAT WILL PLACE THE MATERIAL WITHIN THE SPECIFIED TEMPERATURE RANGE AND TO THE DIMENSIONS SHOWN ON THE PLANS AND IS APPROVED FOR USE BY THE ENGINEER.

CRACK SEALANT SHALL BE PLACED AT A TEMPERATURE SUCH THAT THE SEALANT TEMPERATURE PLUS AIR TEMPERATURE FALLS WITHIN A RANGE OF 150 TO 200 DEGREES FAHRENHEIT.

WHEN CURED, CRACK SEALANT SHALL BE AT LEAST FLUSH WITH THE PAVEMENT SURFACE OR EXTEND NO MORE THAN ONE-EIGHTH (1/8) INCH ABOVE THE PAVEMENT SURFACE. **NOTE: THE COMMON PRACTICE OF “BAND-AIDING” A THICK RIBBON OF CRACK SEALANT TO THE PAVEMENT SURFACE IS NOT ACCEPTABLE.**

SHEET C-7

HOT- APPLIED RUBBERIZED CRACK SEALANT – Product Data Sheet



**PRODUCT DATA SHEET
SUPERFLEX HT**

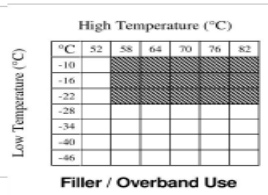
PART NO. 34533 SEPTEMBER 2016

READ BEFORE USING THIS PRODUCT

GENERAL Crafco Superflex HT sealant is a hot-applied asphalt based product used to fill cracks in asphalt concrete or Portland cement concrete pavements in moderate to very hot climates. Superflex HT is supplied in solid form which when melted and properly applied forms an adhesive and flexible compound that resists cracking in the winter and is highly resistant to tracking or pick-up by vehicle tires in hot climates. Superflex HT is used in highway, street, airfield and parking lot pavements and is applied to pavement cracks using either pressure feed melter applicators or pour pots. At application temperature, Superflex HT is a low viscosity, self-leveling product which easily penetrates narrow cracks. Superflex HT can be melted in jacketed double type melting units, or in small direct bottom fired types of melters. Both melter types must have sufficient agitation and temperature indicating devices to assure that the material is heated to and maintained within the specified application temperature range of 380° to 400°F (193 to 204°C). VOC = 0 g/l.

USAGE GUIDELINES Superflex HT is applicable for Filler/Overband Use in moderate to very hot climates with high and low pavement temperatures identified in the chart. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBind V 3.1, and sealant or filler use is determined following Crafco Product Selection procedures.

Applicable Pavement Temperatures



SPECIFICATION CONFORMANCE Crafco Superflex HT meets the following requirements when heated to the maximum heating temperature in accordance with ASTM D5167:

- Tests**
- Softening Point (ASTM D36)
 - Flexibility, 1/8" (3.2 mm) specimen, 90° bend, 10 sec., 1" (25mm) mandrel (ASTM D3111 modified)
 - Cone Penetration (ASTM 5329)
 - Flow, 140°F (60°C), 5 hr. (ASTM D5329)
 - Elongation 77°F (25°C) (ASTM D412 die C)
 - Opening to Traffic Time
 - Maximum Heating Temperature
 - Application Temperature Range

- Specification Limits**
- 210°F (99°C) min.
 - Pass at 0°F (-18°C)
 - 45 max.
 - 0 mm.
 - 1000% min.
 - 30 minute max.
 - 400°F (204°C)
 - 380-400°F (193-204°C)

INSTALLATION The unit weight of Crafco Superflex HT is 9.2 lbs./gal. (1.10 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Superflex Sealants to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of sealant

PACKAGING Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x102 cm) 4-way pallets; can be stored outside; and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.

- BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
- PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

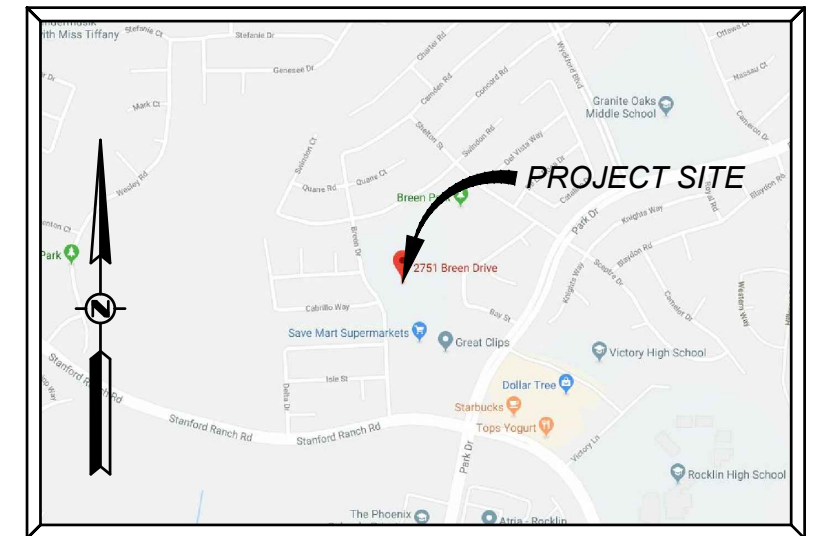
WARRANTY Crafco, Inc. warrants that Crafco products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**

BREEN ELEMENTARY SCHOOL PAVEMENT REHABILITATION PLANS

2751 BREEN DRIVE
ROCKLIN, CA 95765



LIMITS OF IMPROVEMENTS
SCALE: 1"=200'



VICINITY MAP
NOT TO SCALE

SHEET INDEX:

- C1 TITLE SHEET
- C2.1-C2.3 GENERAL NOTES
- C3 AC PAVEMENT REMOVAL AND REPLACEMENT PLAN
- C4 CRACK FILL, SEAL COAT AND STRIPING PLAN
- C5 AC PAVEMENT REPAIR DETAILS
- C6 PLAYCOURT STRIPING DETAILS
- C7 MATERIAL SPECIFICATIONS

OWNER:

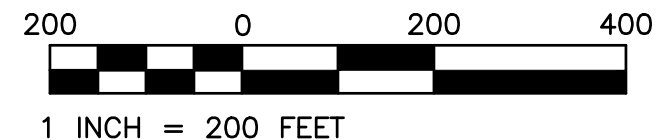
CRAIG ROUSE
ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DRIVE,
ROCKLIN, CA 95677
PH: (916) 630-2246



Know what's below.
Call before you dig.
or (800) 227-2600

NOTICE TO CONTRACTOR :

THIS SET IS BASED ON AERIAL PHOTOGRAPHY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING INFORMATION SHOWN ON THESE PLANS IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING SITE CONDITIONS. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR MUST ALSO CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.



PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES		
					0	1/2	1
QUANT.					BY	CHECK	
DRAWN					PGC	RFE	
DESIGN					PGC	RFE	
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK	

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

**ROCKLIN UNIFIED
SCHOOL DISTRICT**
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

BREEN ELEMENTARY SCHOOL
2751 BREEN DRIVE,
ROCKLIN, CA 95765
TITLE SHEET

Sheet
C1
1 of 9
01/15/2019

TECHNICAL SPECIFICATIONS:

TS-1 THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER.

TS-2 NOTIFICATIONS
IN ORDER TO ALLOW THE OWNER SUFFICIENT TIME TO NOTIFY THE VARIOUS OCCUPANTS OF UPCOMING WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AT LEAST TEN (10) WORKING DAYS BEFORE COMMENCING WORK ON ANY PORTION OF THE WORK.

TS-3 PROTECTION OF EXISTING INSTALLATIONS
THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING INSTALLATIONS FROM DAMAGE RESULTING FROM THE OPERATION OF EQUIPMENT OR PLACEMENT OF MATERIAL. SUITABLE PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXPOSED SURFACES FROM DISCOLORATION RESULTING FROM THE APPLICATION OF ASPHALTIC MATERIALS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, AT NO EXTRA COST TO THE OWNER, TO PROVIDE SUITABLE MEANS OF DUST CONTROL RESULTING FROM HIS PERFORMANCE OF THE WORK. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

TS-4 CONTROL OF MATERIALS
ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED IN A WORKMANLIKE MANNER. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE AREAS OF WORK SHOWN ON THE PLANS.
THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO VERIFY WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER.
INITIAL TESTING DONE TO DETERMINE SPECIFICATION COMPLIANCE WILL BE PERFORMED AND PAID FOR BY THE OWNER. IF ANY PARTICULAR PORTION OF THE WORK DOES NOT PASS THIS TESTING, IT SHALL BE SUBJECT TO A RETEST AFTER THE CONTRACTOR FEELS HE HAS REMEDIATED THE DEFICIENCY. **ALL RETESTING WILL BE PAID FOR BY THE CONTRACTOR.**
IN THE EVENT THAT THE OWNER DOES NOT PROVIDE ON-SITE INSPECTION DURING CONSTRUCTION, THE CONTRACTOR IS HEREBY NOTIFIED THAT TWO OR MORE CORE TESTS WILL BE TAKEN TO CHECK FOR COMPLIANCE TO THESE SPECIFICATIONS. IF DEFICIENCIES IN MATERIAL QUALITY, THICKNESS, OR DENSITIES ARE DETERMINED, THE ENTIRE AREA REPRESENTED BY THAT TEST SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. IN ADDITION, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ADDITIONAL TESTING TO DETERMINE COMPLIANCE OF ALL OTHER AREAS TESTED. ALL NON-COMPLYING AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

TS-5 WORK SCHEDULE AND PUBLIC SAFETY
FIVE (5) DAYS PRIOR TO INITIATING THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE OF WORK TO THE ENGINEER FOR HIS REVIEW. THE PLAN SHALL CLEARLY INDICATE HOW THE WORK IS TO BE LAID OUT AND THE ORDER IN WHICH INDIVIDUAL AREAS WILL BE COMPLETED. THE GOAL OF THIS REQUIREMENT IS TO ENSURE THAT PUBLIC TRAFFIC IS SAFELY MAINTAINED AND THAT THERE IS ADEQUATE PUBLIC ACCESS TO THE SITE.
CONTRACTOR IS RESPONSIBLE FOR BARRICADING OR TAPING OFF THE WORK TO BE COMPLETED EARLY ENOUGH IN ADVANCE TO ASSURE NO VEHICLES OR OTHER OBSTACLES ARE LEFT IN THE WAY OF CONSTRUCTION.

TS-6 TRAFFIC CONTROL
CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL NECESSARY TO MAINTAIN PUBLIC SAFETY AND ACCESS TO THE PROJECT SITE. PREAPPROVAL BY THE ENGINEER IS REQUIRED BEFORE IMPOSING ANY TRAFFIC CLOSURES. TRAFFIC CONTROL MAY INVOLVE FLAGMEN, GUARDS, BARRICADES, SIGNS, LIGHTS, FLARES, RADIOS, AND OTHER FACILITIES.
THE CONTRACTOR SHALL INCLUDE TRAFFIC CLOSURES IN THE PROPOSED WORK SCHEDULE SUBMITTAL AS DESCRIBED IN SECTION TS-5, "WORK SCHEDULE, AND PUBLIC SAFETY."

TS-7 DUST CONTROL
THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.

TS-8 BEFORE EXECUTION OF ANY WORK, THE CONTRACTOR SHALL EXAMINE ACTUAL JOB CONDITIONS AND REPORT TO RFE ENGINEERING, INC. ANY ERROR, OMISSION, OR DISCREPANCY AFFECTING WORK. UPON COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO RFE ENGINEERING, INC. IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER OR CITY ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. ANY COST INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TS-9 THE CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK THAT IS CONSTRUCTED.

TS-10 THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER "AS BUILT" DRAWINGS AT PROJECT COMPLETION. THE CONTRACTOR SHALL PROVIDE ONE COMPLETE ACCURATE SET OF RECORD CHANGES. THE CHANGES SHALL BE PLACED ON A CLEAN SET OF PROJECT DRAWINGS IN RED, AND GIVEN TO THE ENGINEER AT JOB COMPLETION.

TS-11 THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE QUANTITIES FOR BID AND FIELD INSTALLATION.

TS-12 THESE DRAWINGS ARE FOR THIS SPECIFIC PROJECT AND NO OTHER USE IS AUTHORIZED. RFE ENGINEERING, INC. DISCLAIMS ALL RESPONSIBILITY FOR CONSTRUCTION BEYOND WHAT IS SPECIFICALLY DESIGNED OR DETAILED HEREIN.

TS-13 EROSION CONTROL NOTES
EROSION AND SEDIMENTATION CONTROL PROGRAM: THE LOCATION OF EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THESE PLANS MAY VARY ACCORDING TO THE SEASON AND PHASE OF CONSTRUCTION. THE OBJECTIVE OF THESE MEASURES IS TO MITIGATE THE EROSION AND SEDIMENTATION IMPACTS.

MAINTENANCE PROGRAM: THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE EROSION AND SEDIMENTATION MITIGATION MEASURES ON ALL DISTURBED AREAS BEFORE, DURING, AND AFTER STORMS. THE CONTRACTOR SHALL ENSURE THAT THE EROSION AND SEDIMENTATION MEASURES ARE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS.

INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. WINTERIZATION AND EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

TS-14 DEMOLITION PLAN NOTES
SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION. ENGINEER SHALL VERIFY LIMITS OF DEMOLITION. PROTECT EXISTING PAVEMENT THAT WILL REMAIN.

THE DISPOSAL OF ALL DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS. ANY PERMITS REQUIRED FOR SUCH DISPOSAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.

EXISTING MATERIALS (I.E. IRRIGATION, ELECTRICAL) TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

TS-15 FULL-DEPTH AC PAVEMENT REPAIR OR RECONSTRUCTION

GENERAL
AREAS DESIGNATED BY THE ENGINEER SHALL BE DUG OUT TO A DEPTH AS SHOWN ON THE PLANS, REMOVED AND REPLACED WITH THE SAME THICKNESS OF AC, UNLESS OTHERWISE DIRECTED ON THE CONTRACT PLANS. THE AC SHALL BE PLACED IN TWO (2) EQUAL LIFTS. THE FINAL LIFT MUST BE 1.5 INCHES THICK OR GREATER. **THE COMMON PRACTICE OF CAPPING DIGOUTS WITH A THIN LIFT OF ASPHALT IS NOT ACCEPTABLE.**

MATERIALS
THE ASPHALT CONCRETE USED FOR THIS WORK SHALL CONFORM TO ALL REQUIREMENTS OF SECTION TS-17, "ASPHALT CONCRETE," OF THESE TECHNICAL SPECIFICATIONS.
TACK COAT EMULSION SHALL BE SS-1H.

CONSTRUCTION
THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR DISPOSAL OF EXCAVATED MATERIALS.
ALL EDGES SHALL BE SAW-CUT OR MILLED. IF A MILLING MACHINE IS USED, ALL SLOPING EDGES SHALL BE CHIPPED TO A VERTICAL FACE. EXPOSED EDGES SHALL BE PROTECTED AGAINST BREAKAGE WITH TIMBERS OR AC MIX WHENEVER A ROLLER ENTERS OR LEAVES THE REPAIR SPOT.

THE UNDERLYING MATERIAL TO REMAIN IN PLACE SHALL BE RECOMPACTED TO 95 PERCENT MINIMUM RELATIVE COMPACTION AS DETERMINED BY AASHTO TESTS T180 AND T238 TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE REPAIR. AFTER COMPACTION AND PRIOR TO THE PLACING OF ASPHALT CONCRETE, THE VERTICAL EDGES OF THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT.
WHENEVER THE SURFACE COURSE OF AC IS PLACED MORE THAN FOUR HOURS AFTER THE BASE COURSE OR, IN THE OPINION OF THE ENGINEER, CONTAMINATION BY DIRT OR DUST HAS CAUSED THE BASE COURSE TO LOSE ITS TACKINESS, A TACK COAT SHALL BE APPLIED TO THE ENTIRE AREA OF THE REPAIR BEFORE PLACING THE SURFACE COURSE. TACK COAT SHALL BE APPLIED AT A RATE EQUIVALENT TO 0.05 TO 0.15 GALLONS PER SQUARE YARD.
THE FINISHED REPAIR SHALL CONFORM TO THE SURROUNDING GRADE AND CONTOUR AND SHALL NOT TRAP WATER OR PRESENT A VISIBLE HUMP.

ASPHALT CONCRETE SHALL BE COMPACTED TO A MINIMUM 93 PERCENT OF MAXIMUM THEORETICAL DENSITY (DENSITY WITH ZERO AIR VOIDS) AS DETERMINED BY AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) D-2041.

UNSUITABLE MATERIAL
IN THE EVENT THAT THE UNDERLYING MATERIAL IS UNSUITABLE, IT SHALL BE EXCAVATED BELOW THE DEPTH REQUIRED ABOVE AND DISPOSED OF IN ACCORDANCE WITH THESE SPECIAL PROVISIONS. THE LIMITS OF REMOVAL SHALL BE DESIGNATED BY THE ENGINEER. THE RESULTING SPACE SHALL BE FILLED WITH A SINGLE LIFT OF ASPHALT CONCRETE.

UNSUITABLE MATERIAL IS DEFINED AS MATERIAL THE ENGINEER DETERMINES TO BE:

- a. OF SUCH UNSTABLE NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS AT OPTIMUM MOISTURE CONTENT; OR
- b. TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE IN-PLACE DRYING PRIOR TO INCORPORATION INTO THE WORK; OR
- c. OTHERWISE UNSUITABLE FOR THE PLANNED USE.


TS-16 TACK COAT
AN ASPHALT EMULSION TACK COAT SHALL BE APPLIED TO ALL VERTICAL SURFACES OF EXISTING PAVEMENT, CURBS, GUTTERS, AND CONSTRUCTION JOINTS, AGAINST WHICH ADDITIONAL MATERIAL IS TO BE PLACED.
ADDITIONALLY, WHEN PLACING AN OVERLAY WITHOUT FABRIC, THE TOP LIFT OF A FULL-DEPTH AC REPAIR, OR AC LEVELING, PAVING SHALL BE PRECEDED BY A TACK COAT OVER THE ENTIRE SURFACE UNLESS THE EXISTING SURFACE HAS BEEN PLACED WITHIN THE LAST FOUR HOURS AND, IN THE OPINION OF THE ENGINEER, IS CLEAN ENOUGH TO BOND WITHOUT THE NEED FOR A TACK COAT.
THE TACK COAT SHALL BE SS-1H, MEETING THE REQUIREMENTS OF SECTION 94 OF THE STATE STANDARD SPECIFICATIONS. FULL COMPENSATION FOR FURNISHING AND APPLYING ASPHALT EMULSION TACK COAT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEMS INVOLVING ASPHALT CONCRETE.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\CI-C7 BREEN EXHIBIT.dwg, Jan 15, 2019 - 10:39 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPR'VD

ORIGINAL SCALE IS IN INCHES		
0	1/2	1
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK



RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

BREEN ELEMENTARY SCHOOL
2751 BREEN DRIVE,
ROCKLIN, CA 95765
GENERAL NOTES

Sheet
C2.1
2 of 9
01/15/2019

TS-17 ASPHALT CONCRETE

GENERAL

THE FOLLOWING PROVISIONS FOR ASPHALT CONCRETE MATERIAL SHALL APPLY TO WORK COMPLETED WITHIN THESE SPECIFICATIONS.

MATERIALS

ASPHALT CONCRETE SHALL COMPLY WITH THE PROVISIONS OF SECTION 39 OF THE CALIFORNIA STATE STANDARD SPECIFICATIONS AND AS MODIFIED HEREWITH. THE REQUIREMENTS PROVIDED WITHIN THESE SPECIAL PROVISIONS SHALL SUPERSEDE STATE SPECIFICATIONS WHERE CONFLICTS OR OTHER DISPARITIES EXIST. THE USE OF AGGREGATE SOURCE STEMMING FROM BEAR RIVER OR ANY SIMILAR SOURCE OF AGGREGATE THAT IS KNOWN TO CONTAIN A SIGNIFICANT AMOUNT OF QUARTZITE MATERIAL IS NOT TO BE USED IN PRODUCTION OF ASPHALT CONCRETE MATERIALS FOR THIS PROJECT.

ASPHALT CONCRETE SHALL BE HOT PLANT MIXED AND SHALL BE FURNISHED FROM THE PLANT AT A TEMPERATURE NOT TO EXCEED 325 DEGREES F.

ASPHALT CONCRETE FOR PAVING WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED, STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

ASPHALT CONCRETE FOR PAVEMENT REPAIR WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED; STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

THE ACTUAL ASPHALT CEMENT CONTENT MAY VARY UP TO 0.3% PLUS/MINUS FROM THE TARGET OPTIMUM BITUMEN CONTENT (OBC) UNLESS THE JOB-MIX-DESIGN AND FINAL PRODUCT INDICATE THE REQUIRED PROVISIONS ARE NOT MET.

NOTE: AT THE OBC, THE COMPACTED MIXTURE SHALL HAVE THE FOLLOWING PROPERTIES:

HVEEM STABILITY 35 MIN. TYPE B
37 MIN. TYPE A

THE SUGGESTED JOB-MIX-DESIGN AIR VOIDS BELOW ARE PROVIDED TO HELP OBTAIN COMPACTION REQUIREMENTS IN THE FIELD AND ARE NOT A SPECIFICATION REQUIREMENT.

AIR VOIDS 3% TO 5%

ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED TO INDUSTRY STANDARDS.

SUBMITTALS

THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER FOR REVIEW AND APPROVAL, AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, A LIST OF HIS SOURCES OF MATERIALS TOGETHER WITH A CERTIFICATE OF COMPLIANCE, INDICATING THAT MATERIALS TO BE INCORPORATED IN THE WORK FULFILL THE REQUIREMENTS OF THESE SPECIFICATIONS AND THE JOB-MIX-DESIGN FOR THE ASPHALT CONCRETE. THE CERTIFICATE OF COMPLIANCE SHALL BE SIGNED BY THE MATERIAL SUPPLIER OR HIS REPRESENTATIVE. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE PAVED AREAS SHOWN ON THE PLANS.

AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, THE CONTRACTOR SHALL ALSO FURNISH A **JOB-MIX-DESIGN** FOR THE ASPHALT CONCRETE. THE JOB-MIX-DESIGN SHALL INDICATE ALL OF THE FOLLOWING:

1. PERCENTAGE PASSING EACH SIEVE SIZE
2. PERCENT ASPHALT RECOMMENDED
3. PERCENT VOIDS*
4. STABILITY*
5. MAXIMUM THEORETICAL UNIT WEIGHT*

THE * ITEMS SHALL BE PROVIDED AT EACH ASPHALT CONTENT USED TO ARRIVE AT THE RECOMMENDED OPTIMUM BITUMEN CONTENT.

THE JOB-MIX-DESIGN SHALL BE IN EFFECT UNTIL A CHANGE IS APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

TS-18 ADJUST UTILITY COVERS

STORM DRAIN AND SEWER MANHOLE COVERS, CLEANOUTS, WATER VALVE COVERS, UTILITY VAULT AND OTHER SUCH UTILITY ACCESS COVERS, WITHIN AREAS TO BE PAVED WITH ASPHALT CONCRETE SHALL BE ADJUSTED BY THE CONTRACTOR TO THE NEW FINISHED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE NUMBER OF UTILITY COVERS TO BE ADJUSTED, ACCURATELY REFERENCING ALL COVERS PRIOR TO PAVING AND ADJUSTING THE COVERS AFTER PAVING HAS BEEN COMPLETED.

CUTTING OF THE NEW PAVEMENTS TO MAKE UTILITY COVER ADJUSTMENTS SHALL BE ACCOMPLISHED WITHOUT DISTURBING OR DEFORMING ASPHALT CONCRETE THAT IS TO REMAIN. DEFORMED ASPHALT CONCRETE SHALL BE REMOVED AND REPAIRED AS DIRECTED BY THE ENGINEER.

UNLESS OTHERWISE SPECIFIED BY THE UTILITY OWNER, COVER FRAMES ARE TO BE SET TO GRADE AND BACKFILLED TO WITHIN 1 1/2 INCHES OF THE FINISHED SURFACE WITH PORTLAND CEMENT CONCRETE. ASPHALT CONCRETE CONFORMING TO THE PROVISIONS IN SECTION TS-11 OF THESE TECHNICAL SPECIFICATIONS SHALL BE USED TO COMPLETE THE RESTORATION TO THE NEW FINISHED SURFACE. SURFACE TOLERANCES AS SPECIFIED FOR ASPHALT CONCRETE OVERLAY SHALL APPLY TO THE RESTORATION OF PAVING SURFACES, INCLUDING THE POSITIONING OF UTILITY COVERS AND FRAMES.

TS-19 SURFACE SEAL COAT (TWO COATS)

GENERAL

THIS WORK SHALL CONSIST OF PREPARING THE SURFACE OF EXISTING ASPHALT CONCRETE PAVEMENT AND APPLYING A SEAL COAT COMPOSED OF A PETROLEUM ASPHALT EMULSION, LATEX POLYMER, AND MINERAL AGGREGATE. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS FOR DOING ALL OF THE WORK NECESSARY TO SEAL COAT THE AREAS DESIGNATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED MUST BE ERADICATED PRIOR TO THE SEAL COAT APPLICATION.

MATERIALS

THE ASPHALT EMULSION SEAL COAT MATERIAL TO BE FURNISHED AND APPLIED BY THE CONTRACTOR SHALL BE **RAYNGUARD "STEELGUARD" PAVEMENT SEALER**, OR APPROVED EQUAL. **NOTE: COAL TAR EMULSION AND GILSONITE PRODUCTS ARE NOT ACCEPTABLE.**

SEAL COAT MATERIAL DELIVERED FOR USE ON THE WORK SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

1. RESIDUE AT 300 - 400 DEGREES F., % 60 - 70
2. DEHYDRATION, 96 HOURS AT 100 DEGREES F. 0.6 MIN
3. SOLUBILITY OF RESIDUE IN C2HCL 15 - 20
4. LOSS ON IGNITION OF INSOLUBLE RESIDUE % 16 MAX
5. CONE PENETRATION AT 77 DEGREES F., DMM 400 - 700

MIX DESIGN COMPOSITION:

FIRST APPLICATION

100 GALLONS SEAL COAT MATERIAL
300 POUNDS SILICA SAND (30 MESH) (IF NOT INCLUDED IN SEAL MATERIAL)
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF PORTABLE WATER FOR DILUTION

SECOND APPLICATION

100 GALLONS SEAL COAT MATERIAL
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF POTABLE WATER FOR DILUTION

DILUTION OF SEAL MATERIAL WITH WATER FOR EASE OF APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ANY WATER ADDITION SHALL BE CAREFULLY MEASURED INTO A KNOWN VOLUME OF SEAL MATERIAL.

AGGREGATE SHALL BE EITHER NATURAL OR MANUFACTURED PRODUCT COMPOSED OF CLEAN, HARD, DURABLE PARTICLES FREE FROM DIRT, ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A CERTIFICATE FROM THE SUPPLIER OF THE SEAL COAT MATERIAL GIVING THE TRADE NAME OF THE SEALER AND VERIFICATION THAT THE SEALER CONFORMS TO THESE SPECIFICATIONS.

APPLICATION

THE SURFACE TO BE SEALED SHALL BE CLEANED TO REMOVE ALL ORGANIC MATERIALS, SAND, DUST, AND CLAY. PRIOR TO PLACING THE SEAL, CRACKS SHALL BE FILLED, AND ALL AREAS CAPABLE OF PONDING WATER GREATER THAN 3/8 INCH IN DEPTH SHALL BE PRE-LEVELLED AS NECESSARY TO ELIMINATE THE POSSIBILITY OF STANDING WATER.

BEFORE PLACING THE SEAL, ALL AREAS OF WATER DAMAGED (RAVELED) PAVEMENT IN EXCESS OF 1/8 INCH REMOVED ASPHALT CONCRETE SHALL RECEIVE ONE PRECOAT OF UNDILUTED EMULSIFIED ASPHALT SEAL MATERIAL WITH 5 POUNDS OF SAND PER GALLON OF SEAL. THE PRECOAT SHALL FILL THE RAVELED PAVEMENT AND PROVIDE A SMOOTH, NEAT SURFACE PRIOR TO PLACEMENT OF THE TWO COATS OF DILUTED SEAL MATERIAL.

ACCUMULATIONS OF OIL AND GREASE THAT MAY ADVERSELY AFFECT SEAL COAT BONDING SHALL BE REMOVED BY GRINDING, SCRAPING, OR SCRUBBING WITH TRISODIUM PHOSPHATE OR AN EQUALLY EFFECTIVE INDUSTRIAL DETERGENT. PAVEMENT AREAS REDUCED BY GRINDING SHALL RECEIVE A TACK COAT AND SKIN PATCH OF 1/4 INCH AC MIX. PAVEMENT AREAS CLEANED WITH DETERGENT SHALL BE THOROUGHLY RINSED WITH WATER AND ALLOWED TO DRY. PRIOR TO SEAL COATING, THE CLEANED AREAS SHALL BE TREATED WITH A PROPRIETARY OIL STAIN PRE-TREATMENT OR A 1:1 SOLUTION OF ISOPROPYL ALCOHOL AND SHELLAC.

SEAL SHALL NOT BE APPLIED TO A WET SURFACE NOR WHEN RAIN OR FREEZING WEATHER IS EXPECTED WITHIN 24 HOURS. AIR AND PAVEMENT TEMPERATURE AT TIME OF APPLICATION SHALL BE BETWEEN 60 AND 95 DEGREES F. AND NO SEAL COAT SHALL BE APPLIED WHEN THE AIR TEMPERATURE IS 60 DEGREES F OR LESS. ALSO, OTHER CONDITIONS ARE AS FOLLOWS:

MINIMUM FOUR (4) HOURS OF SUNSHINE EXPECTED IN NEXT TEN (10) HOURS, RELATIVE HUMIDITY BELOW 50% AND WIND SPEED MINIMUM OF FIVE (5) MILES PER HOUR.

THE CONTRACTOR MAY, BASED ON HIS OWN EXPERIENCE, APPLY SEAL COAT DURING FAVORABLE DRYING CONDITIONS WHEN ONE MAJOR POSITIVE FACTOR IN DRYING SUCH AS SUNSHINE, SURFACE TEMPERATURE, HIGH AIR TEMPERATURE, OR LOW HUMIDITY COMPENSATE FOR OTHER NEGATIVE FACTORS. PRIOR TO PLACING THE FIRST COAT OF SEAL COAT IN EXCEPTIONALLY HOT WEATHER, THE SURFACE SHALL BE DAMPENED WITH WATER. ALL EXCESS WATER SHALL BE REMOVED TO LEAVE THE SURFACE ONLY SLIGHTLY DAMP.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\CI-C7 BREEN EXHIBIT.dwg, Jan 18, 2019 - 08:45 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>BREEN ELEMENTARY SCHOOL 2751 BREEN DRIVE, ROCKLIN, CA 95765</p> <p>GENERAL NOTES</p>	<p>Sheet C2.2</p>												
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>QUANT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> </table>				QUANT.				DRAWN	PGC	RFE		DESIGN	PGC	RFE		<p>3 of 9</p>
QUANT.																					
DRAWN	PGC	RFE																			
DESIGN	PGC	RFE																			
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK															

TS-20 EMULSIFIED ASPHALT CRACK SEAL

GENERAL

THIS WORK APPLIES TO ALL CRACKS AND JOINTS IN AND ADJACENT TO THE ASPHALT CONCRETE PAVEMENT AS INDICATED ON THE PLANS. FOR CRACKS AND JOINTS 1/4 INCH AND WIDER, THE WORK CONSISTS OF CLEANING, STERILIZING WHERE WEEDS ARE PRESENT, FILLING WITH EMULSIFIED ASPHALT CRACK SEAL AND COVERING WITH SAND. FOR CRACKS AND JOINTS LESS THAN 1/4 INCH WIDE, THE WORK CONSISTS ONLY OF WEED CLEANING AND STERILIZATION.

NO ROUTING OF PAVEMENT IS REQUIRED FOR THIS PROJECT.

MATERIALS

CRACK SEAL SHALL BE AN EMULSIFIED MATERIAL THAT CAN BE READILY HANDLED AT AMBIENT TEMPERATURES, CAN BE STORED FOR PERIODS OF UP TO SIX MONTHS, AND IS MADE WITH BASE MATERIALS THAT WILL REMAIN DUCTILE WITH AGING AND PROVIDE RESILIENCY UNDER EXTREME CLIMATIC CONDITIONS.

THE SEALANT SHALL CONTAIN NO VOLATILE ORGANIC COMPOUNDS WHICH CONTRIBUTE TO AIR POLLUTION AND SHALL CONFORM TO THE REQUIREMENTS IN THE FOLLOWING TABLE:

PROPERTY	TEST METHOD	REQUIREMENTS
VISCOSITY @ 77 F (25 C), SFS	ASTM D-244-76	25-150
PUMPING STABILITY	GB METHOD (1)	PASS
5-DAY SETTLEMENT TEST, PERCENT	ASTM D-244-76	5.0 MAXIMUM
CEMENT MIXING TEST, PERCENT	ASTM D-244-76	2.0 MAXIMUM
SIEVE TEST, PERCENT	ASTM D-244-76	0.1 MAXIMUM
PARTICLE CHARGE TEST	ASTM D-244-76	POSITIVE
RESIDUE, PERCENT	ASTM D-244-76 (MOD) (3)	62 MINIMUM
TEST OF RESIDUE	ASTM D-244-76	
VISCOSITY AT 140 F (60 C), CS.	ASTM D-244-76	1000-4000

NOTES:

- PUMPING STABILITY IS DETERMINED BY CHARGING 450 ML. OF EMULSION INTO A ONE-LITER BEAKER AND CIRCULATING EMULSION THROUGH A GEAR PUMP (ROPER 29 B22621) HAVING 1/4 INCH INLET AND OUTLET. THE EMULSION PASSES IF THERE IS NO SIGNIFICANT OIL SEPARATION AFTER CIRCULATING TEN MINUTES.
- TEST PROCEDURE IDENTICAL WITH ASTM D-244 EXCEPT THAT DISTILLED WATER SHALL BE USED IN PLACE OF TWO PERCENT SODIUM OLEATE SOLUTION.
- ASTM D-244 EVAPORATION TEST FOR PERCENT OF RESIDUE IS MODIFIED BY HEATING A 50 GRAM SAMPLE TO 300 F (149 C) UNTIL FOAMING CEASES, THEN COOLING IMMEDIATELY AND CALCULATING RESULTS.

THE VENDOR SHALL FURNISH CERTIFICATION THAT THE CRACK SEALANT MATERIAL COMPLIES WITH THE ABOVE REQUIREMENTS. SAND COVER SHALL BE FREE FROM CLAY OR ORGANIC MATERIAL AND SHALL BE OF SUCH SIZE THAT FROM 90 PERCENT TO 100 PERCENT WILL PASS A NO. 4 SIEVE AND NOT MORE THAN 10 PERCENT WILL PASS A NO. 200 SIEVE.

APPLICATION

IMMEDIATELY BEFORE APPLYING THE SEALANT, CRACKS AND JOINTS SHALL BE CLEANED BY MECHANICAL OR HAND METHODS FOLLOWED BY BLAST CLEANING WITH HIGH-PRESSURE AIR JETS TO REMOVE ALL RESIDUE AND FOREIGN MATERIAL TO A MINIMUM DEPTH OF THREE-QUARTER (3/4) INCH. WATER JETS SHALL NOT BE ALLOWED. CRACK SURFACES SHALL BE SURFACE DRY AT THE TIME THE SEALANT IS APPLIED.

CRACK SEALANT MATERIAL MAY BE SPREAD WITH ANY TYPE NOZZLE OR DEVICE THAT WILL PLACE THE MATERIAL WITHIN THE SPECIFIED TEMPERATURE RANGE AND TO THE DIMENSIONS SHOWN ON THE PLANS AND IS APPROVED FOR USE BY THE ENGINEER.

CRACK SEALANT SHALL BE PLACED AT A TEMPERATURE SUCH THAT THE SEALANT TEMPERATURE PLUS AIR TEMPERATURE FALLS WITHIN A RANGE OF 150 TO 200 DEGREES FAHRENHEIT.

WHEN CURED, CRACK SEALANT SHALL BE AT LEAST FLUSH WITH THE PAVEMENT SURFACE OR EXTEND NO MORE THAN ONE-EIGHTH (1/8) INCH ABOVE THE PAVEMENT SURFACE. **NOTE: THE COMMON PRACTICE OF "BAND-AIDING" A THICK RIBBON OF CRACK SEALANT TO THE PAVEMENT SURFACE IS NOT ACCEPTABLE.**

CRACKS SHALL BE COVERED WITH CLEAN SAND IMMEDIATELY FOLLOWING PLACEMENT OF THE SEALANT MATERIAL TO PREVENT TRACKING OF SEALANT BY VEHICLES OR PEDESTRIANS.

A LIGHT BROOMING SHALL BE PERFORMED TO REMOVE LOOSE SAND BEFORE TO THE END OF EACH DAY'S WORK OR AS A FIRST ORDER OF WORK ON THE MORNING FOLLOWING APPLICATION OF THE SAND COVER. THE EXACT TIME OF BROOMING WILL BE DETERMINED BY THE ENGINEER.

TS-21 PAINT MARKINGS

DESCRIPTION

THIS WORK SHALL CONSIST OF CONSTRUCTING PAINTED PARKING STALL LINES, TRAFFIC STRIPES, CURBS, LEGENDS, AND WALKWAY DELINEATION TO THE LAYOUT AND COLOR THAT EXISTED PRIOR TO COMMENCEMENT OF THE CONTRACT WORK, UNLESS OTHERWISE DIRECTED BY THE PROJECT PLANS OR BY THE ENGINEER. THIS WORK ALSO INCLUDES RETOUCHING PREVIOUSLY PAINTED SURFACES MARRED BY CONSTRUCTION ACTIVITIES AND ERADICATING EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED. RESTRIPING IS NOT REQUIRED IN AREAS WITH NO CONSTRUCTION ACTIVITY UNLESS SPECIFICALLY NOTED.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO THE PROVISIONS OF SECTION **TS-20** OF THESE SPECIFICATIONS, TITLE III OF THE AMERICANS WITH DISABILITIES ACT AND ANY LOCAL CODES AS THOSE PROVISIONS RELATE TO RESTRIPING FOR HANDICAP ACCESS.

MATERIALS

PAINT FOR ASPHALT CONCRETE OR ASPHALT SEAL COATED SURFACES SHALL BE A WATER BORNE ACRYLIC AS MAY BE PERMITTED BY LOCAL AIR POLLUTION REGULATIONS, RAPID OR REGULAR DRY AT THE OPTION OF THE CONTRACTOR, COMMERCIALY AVAILABLE AND SPECIFIED BY THE MANUFACTURER AS BEING SUITABLE FOR MARKING AND STRIPING OF SEAL COATED AND NEW ASPHALT PAVEMENTS. PAINT FOR PORTLAND CEMENT SURFACES SHALL BE OIL BASED.

SURFACE PREPARATION

BEFORE APPLYING PAINT, THE PAVEMENT SURFACE SHALL BE CLEANED BY SWEEPING, BLOWING, VACUUMING, OR WASHING AS NECESSARY TO REMOVE MOISTURE, DIRT, OILS, GREASE, ACIDS, LAITANCE OR OTHER FOREIGN MATTER WHICH WOULD REDUCE THE BOND BETWEEN PAINT AND THE PAVEMENT.

CONTROL POINTS

THE CONTRACTOR SHALL LAY OUT ALL NECESSARY CONTROL POINTS FOR MARKINGS AND STRIPES.

MIXING

MECHANICAL MIXERS SHALL BE USED TO MIX PAINT. PRIOR TO APPLYING, THE PAINT SHALL BE MIXED TO UNIFORMLY BLEND PIGMENT AND SOLVENT TOGETHER, AND SHALL BE KEPT THOROUGHLY AGITATED DURING APPLICATION.

APPLICATION

ALL EQUIPMENT USED SHALL PRODUCE MARKINGS AND STRIPES OF UNIFORM QUALITY, TRUE TO LINE AND SPECIFIED THICKNESS.

PAINTED MARKINGS INCLUDING ARROWS, LEGENDS, STRIPING, AND CURBS ON ALL PAVEMENT SURFACES WITHIN THE AREA OF WORK ARE TO BE REPLACED WITH TWO (2) COATS OF PAINT. A CLEANING PRIOR TO SECOND COAT OR TRAFFIC CONTROL REQUIRED TO PROTECT THE PAINT SHALL BE INCLUDED IN THIS ITEM AT NO ADDITIONAL COST TO THE OWNER.

PAINTING SHALL BE APPLIED ONLY ON DRY SURFACE, WHEN TEMPERATURES ARE 50 DEGREES F., OR ABOVE, AND WHEN RAIN, FOG OR CONDENSATION WILL NOT CAUSE DAMAGE. PAINTING SHALL BE CEASED WHENEVER IT IS DETERMINED BY THE ENGINEER THAT WIND WILL PREVENT PROPER PAINT APPLICATION.

THE RATE OF PAINT APPLICATION SHALL BE ONE GALLON TO 125 SQUARE FEET, OR SUFFICIENT TO PRODUCE A WET FILM THICKNESS NOT LESS THAN 15 MILS.

THE CONTRACTOR SHALL PROVIDE NECESSARY PROTECTION FOR PAINTED SURFACES TO PROTECT FROM DAMAGE BY TRAFFIC AND PEDESTRIANS.

TS-22 WATERING

THE CONTRACTOR SHALL NOT DRAW WATER FROM ANY FIRE HYDRANT, EXCEPT TO EXTINGUISH A FIRE, WITHOUT FIRST OBTAINING PERMISSION (AND A METER IF REQUIRED) FROM THE WATER AGENCY CONCERNED.

FULL COMPENSATION FOR DEVELOPING WATER SUPPLY AND APPLYING WATER, INCLUDING WATER USED FOR ROLLERS, DUST CONTROL, AND CLEANUP, SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.

TS-23 CLEAN-UP

THE CONTRACTOR SHALL CLEAN UP THE JOBSITE PRIOR TO ACCEPTANCE OF THE WORK. ALL DIRT, SPOIL, AND DEBRIS OF ANY NATURE SHALL BE REMOVED AND THE ENTIRE SITE SHALL PRESENT A CLEAN, WORKMANLIKE APPEARANCE. ANY DAMAGE TO PAINT WORK, SPILLAGE, OR SPLATTERING FROM PRIME COATING, PAVING OR SEAL COATING OPERATIONS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\CI-C7 BREEN EXHIBIT.dwg, Jan 15, 2019--10:40 am

RFE PROJECT #18113 -- ROCKLIN SCHOOLS PAVEMENT EVALUATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>BREEN ELEMENTARY SCHOOL 2751 BREEN DRIVE, ROCKLIN, CA 95765</p> <p>GENERAL NOTES</p>	<p>Sheet C2.3</p>												
					<table border="1" style="width: 100%;"> <tr> <td>QUANT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> </table>				QUANT.				DRAWN	PGC	RFE		DESIGN	PGC	RFE		<p>4 of 9</p>
QUANT.																					
DRAWN	PGC	RFE																			
DESIGN	PGC	RFE																			
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK															

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\CI-C7 BREEN EXHIBIT.dwg Jan 15, 2019-10:40 am



LEGEND

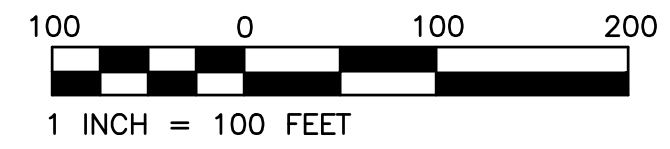
2" THICK GRIND AND 2" THICK HMA OVERLAY



NOTES:

1. SEE AC PAVEMENT REPAIR DETAILS ON SHEET C5.
2. SHOWN AREAS ARE APPROXIMATE LOCATIONS.
3. CORNERS OF REPAIR AREAS WERE MARKED ON-SITE WITH WHITE PAINT.
4. REMOVE AND REPLACE DAMAGE HEADER BOARDS.

DRIVEWAY AREA					
AREA NO.	DIMENSION	THICKNESS	UNIT	TOTAL AREA	UNIT
1	PER PLAN	2	IN	8,500	SF



Know what's below.
Call before you dig.
 or (800) 227-2600

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

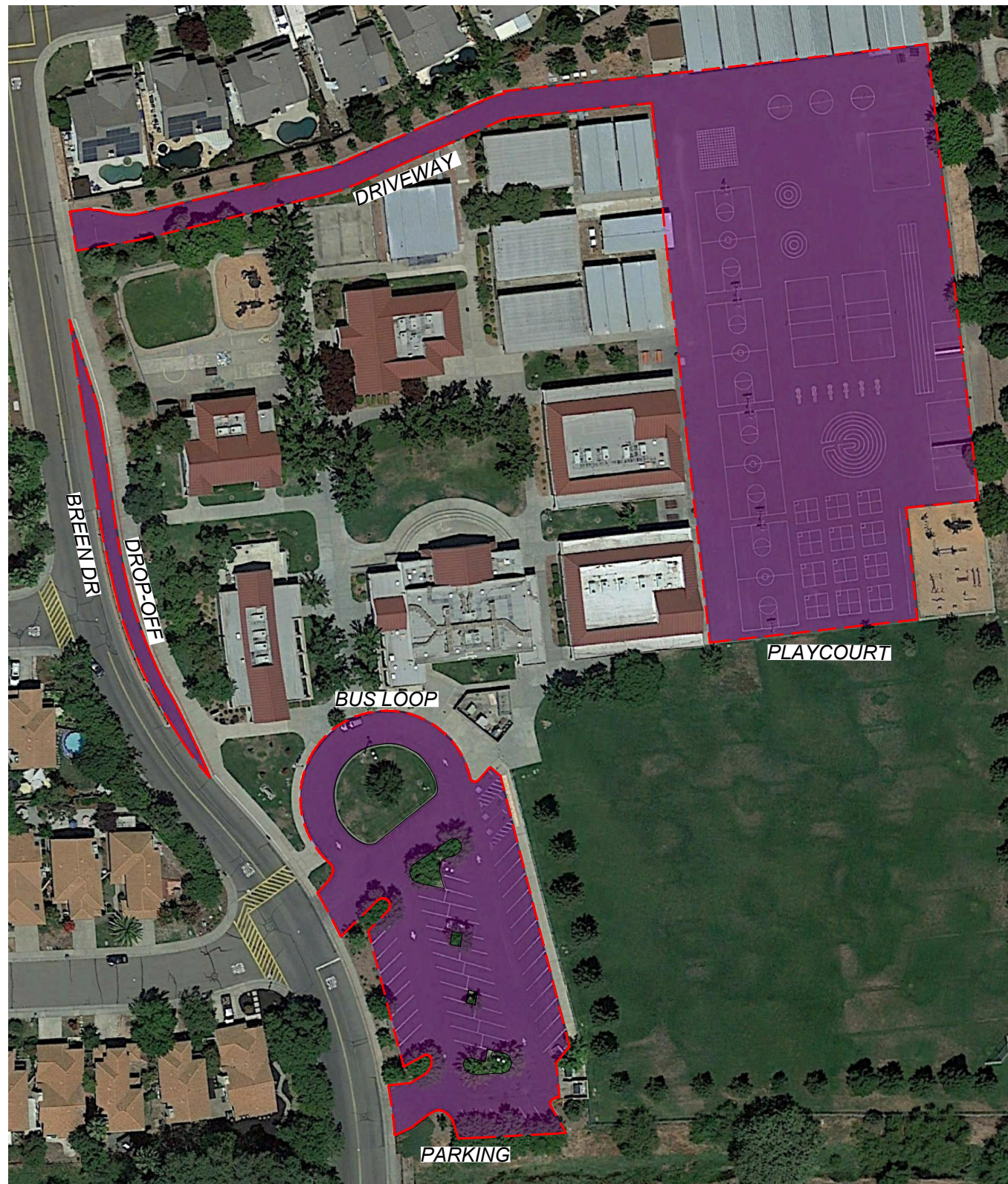
ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

BREEN ELEMENTARY SCHOOL
 2751 BREEN DRIVE,
 ROCKLIN, CA 95765
AC PAVEMENT REMOVAL AND REPLACEMENT PLAN

Sheet
C3
5 of 9
01/15/2019

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\CI-C7 BREEN EXHIBIT.dwg Jan 15, 2019-10:40 am



LEGEND

CRACK FILL, SEAL COAT, AND RE-STRIPE AS EXISTING



NOTES:

1. SEE CRACK FILL DETAILS ON SHEET C5.
2. SEAL COAT WILL BE DONE IN TWO (2) COATS. SEE DETAIL ON SHEET C5.
3. ALL CURBS WILL BE REPAINTED TO MATCH EXISTING. SEE DETAIL ON SHEET C5.
4. ALL STRIPING AND PAVEMENT MARKINGS WILL BE DONE IN TWO (2) COATS AND WILL BE RE-STRIPE AND RE-PAINTED TO MATCH EXISTING.

PARKING, BUS LOOP, AND DROP-OFF AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	1/4"-1" Wide Rubberized Crack fill	LF	2,200
2	Seal Coat (Two Coats)	SF	33,600
3	Parking Stalls	EA	55
4	ADA Symbol	EA	3
5	Accessible Unloading Area	EA	2
6	Arrow	EA	6
7	Red Curb Painting with "NPFL"	LF	550
8	White Curb Painting	LF	170
9	Yellow Curb Painting	LF	125

DRIVEWAY AND PLAYCOURT AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
10	1/4"-1" Wide Rubberized Crack fill	LF	6,000
11	Seal Coat (Two Coats)	SF	83,000
12	45' Ø Maze	EA	1
13	Basketball Court	EA	4
14	Tetherball Court	EA	3
15	Running Track	EA	1
16	Hopscotch	EA	6
17	Multiple Number Stencils	LS	1
18	Four Squares	EA	12
19	27' x 27' Multiple Squares	EA	1
20	18' Ø Circle with Letters/Numbers	EA	2
21	Ball Wall Court	EA	2
22	38' x 38' Court	EA	1



Know what's below.
Call before you dig.
or (800) 227-2600



1 INCH = 100 FEET

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

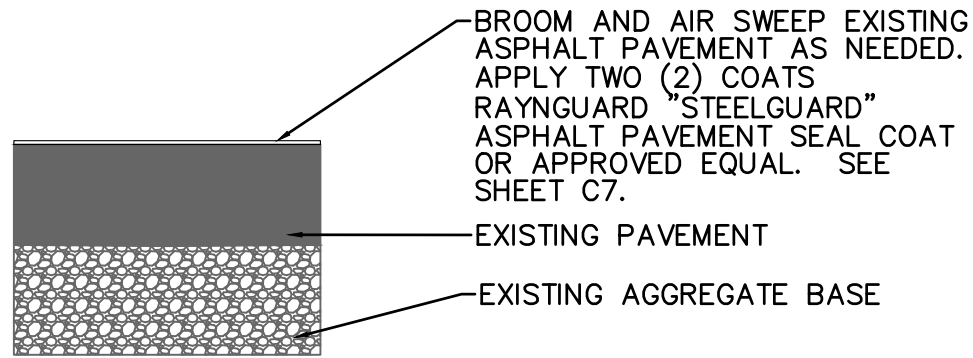
QUANT.	BY	CHECK
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK



ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

BREEN ELEMENTARY SCHOOL
2751 BREEN DRIVE,
ROCKLIN, CA 95765
CRACK FILL, SEAL COAT, AND STRIPING PLAN

Sheet
C4
6 of 9
01/15/2019



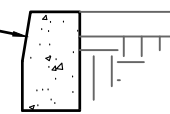
BROOM AND AIR SWEEP EXISTING ASPHALT PAVEMENT AS NEEDED. APPLY TWO (2) COATS RAYNGUARD "STEELGUARD" ASPHALT PAVEMENT SEAL COAT OR APPROVED EQUAL. SEE SHEET C7.

EXISTING PAVEMENT

EXISTING AGGREGATE BASE

POLYMER MODIFIED ASPHALT PAVEMENT SEAL COAT

SANDBLAST AND REMOVE ANY EXISTING LOOSE PAINT PRIOR TO NEW PAINT APPLICATION. PAINT COLOR TO MATCH EXISTING UNLESS OTHERWISE NOTED.



STANDARD CURB

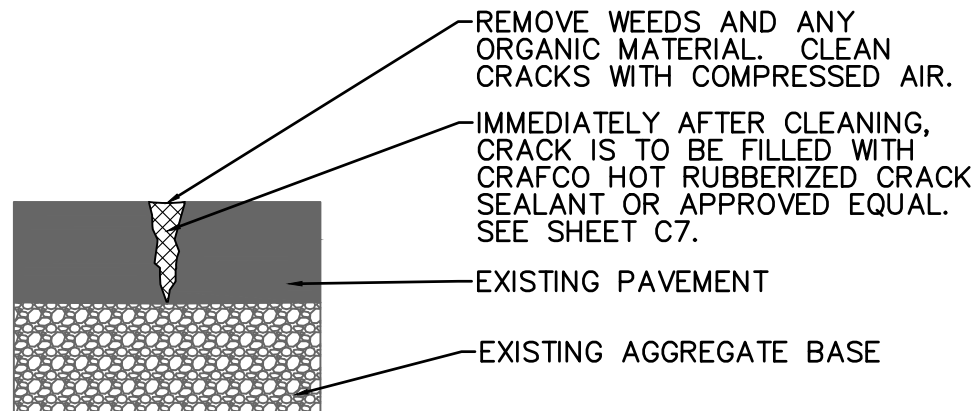


CURB MARKINGS AT FIRE LANES

RAISED CURB REPAINTING

NOTES:

1. REPAINT CURBS TO MATCH EXISTING COLOR AND MARKINGS.



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR.

IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH CRAFCO HOT RUBBERIZED CRACK SEALANT OR APPROVED EQUAL. SEE SHEET C7.

EXISTING PAVEMENT

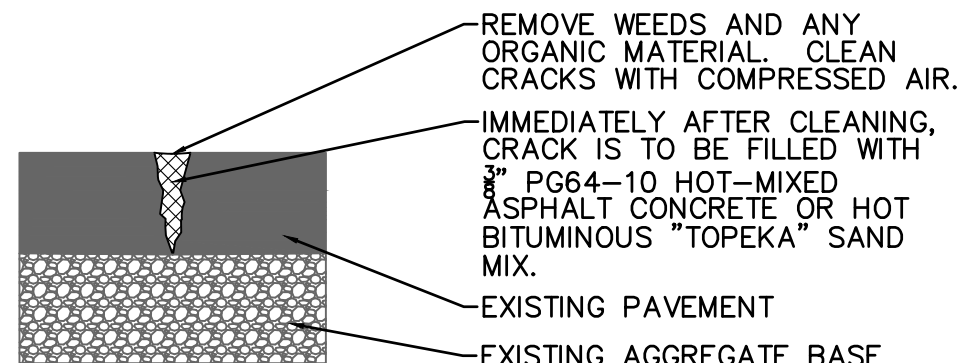
EXISTING AGGREGATE BASE

NOTES:

CRACK WIDTHS 1/4" - 1"

1. CRACK WIDTHS LESS THAN 1/4" SHALL NOT BE SEALED.

ASPHALT CRACK SEAL WITH HOT RUBBERIZED SEALANT



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR.

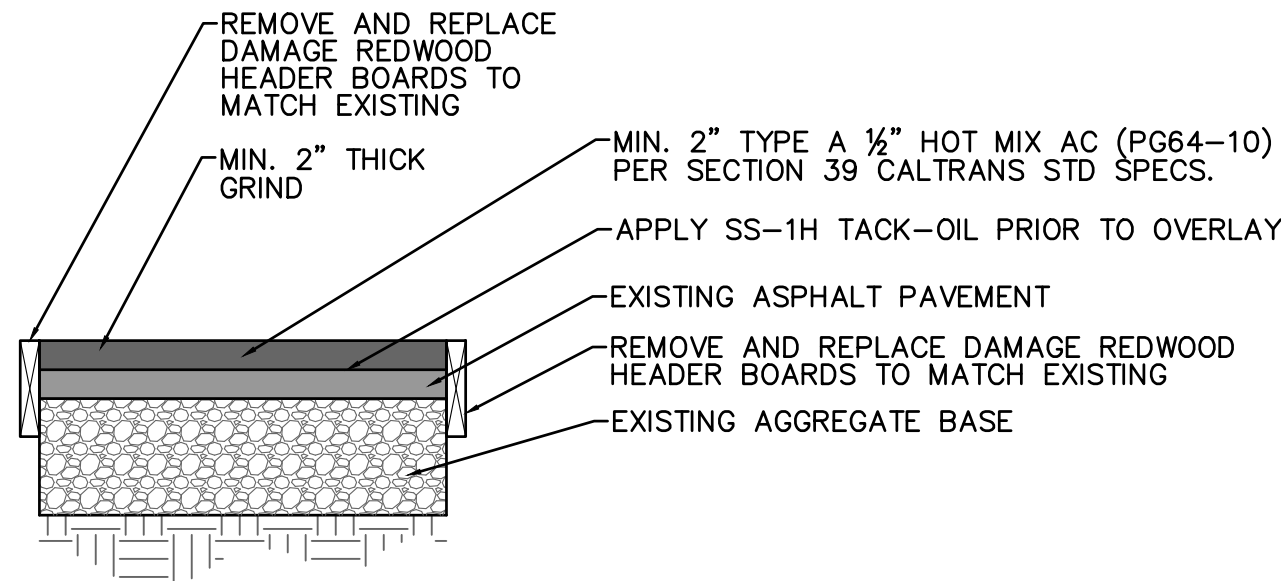
IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH 3/8" PG64-10 HOT-MIXED ASPHALT CONCRETE OR HOT BITUMINOUS "TOPEKA" SAND MIX.

EXISTING PAVEMENT

EXISTING AGGREGATE BASE

CRACK WIDTHS GREATER THAN 1"

ASPHALT CRACK REPAIR WITH HOT BITUMINOUS SAND MIX



REMOVE AND REPLACE DAMAGE REDWOOD HEADER BOARDS TO MATCH EXISTING

MIN. 2" THICK GRIND

MIN. 2" TYPE A 1/2" HOT MIX AC (PG64-10) PER SECTION 39 CALTRANS STD SPECS.

APPLY SS-1H TACK-OIL PRIOR TO OVERLAY

EXISTING ASPHALT PAVEMENT

REMOVE AND REPLACE DAMAGE REDWOOD HEADER BOARDS TO MATCH EXISTING

EXISTING AGGREGATE BASE

DRIVEWAY AREA

2" THICK GRIND AND HMA OVERLAY

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

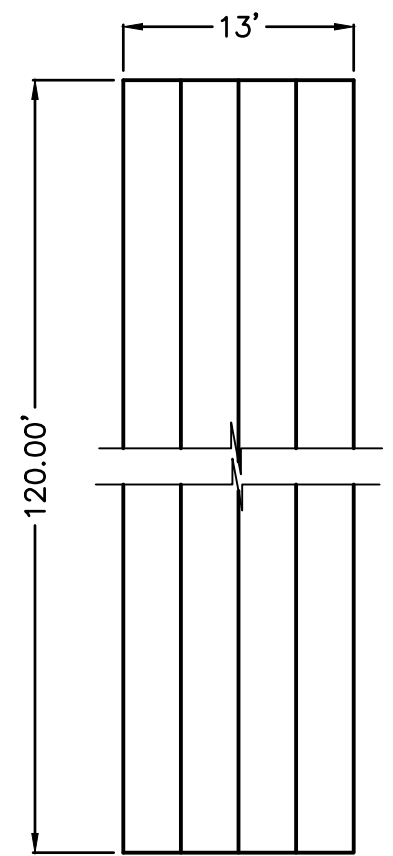
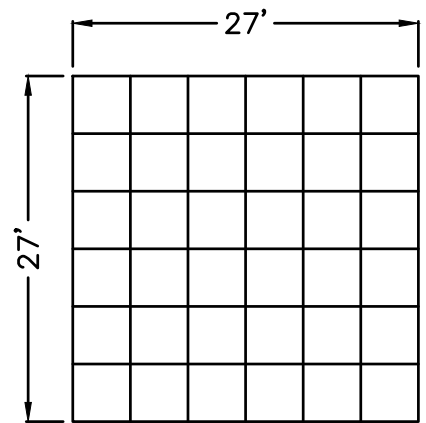
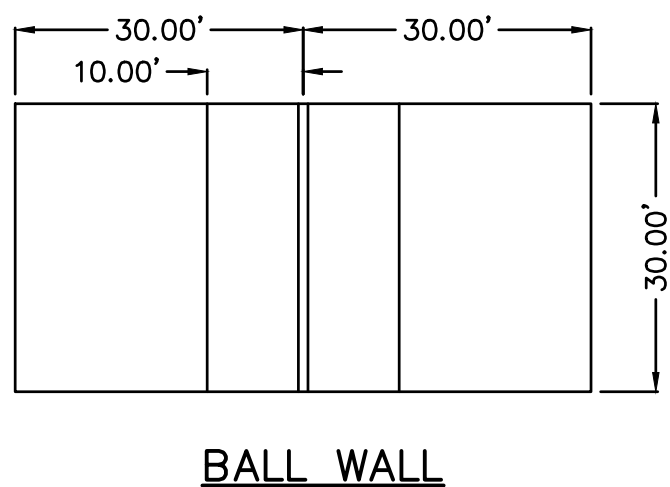
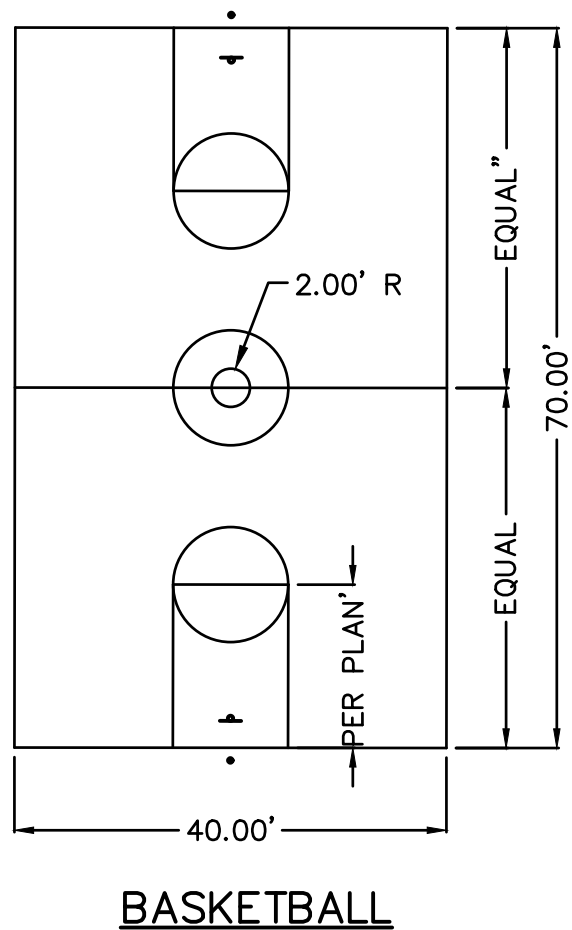
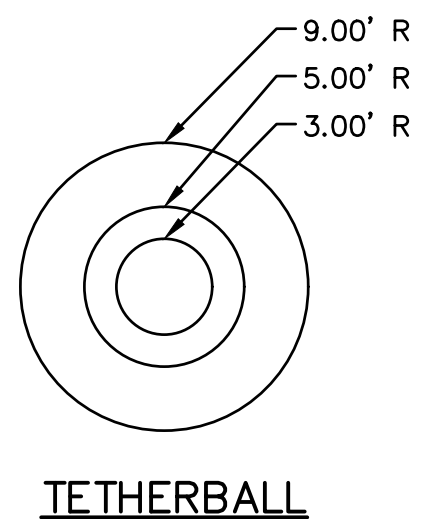
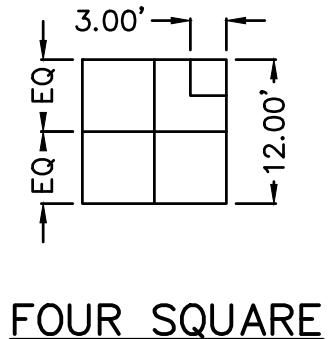
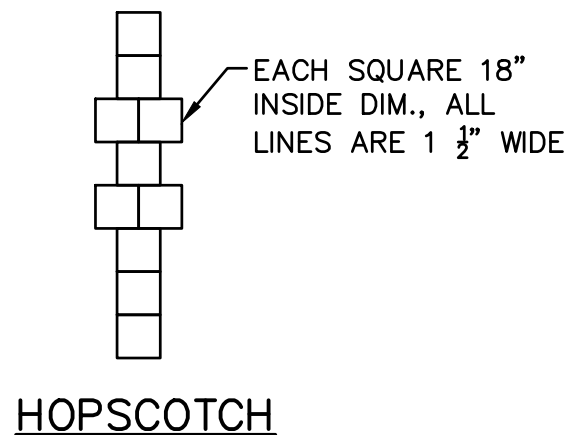
BREEN ELEMENTARY SCHOOL
2751 BREEN DRIVE,
ROCKLIN, CA 95765
AC PAVEMENT REPAIR DETAILS

Sheet
C5
7 of 9
01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\C1-C7 BREEN EXHIBIT.dwg Jan 15, 2019-10:40 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\C1-C7 BREEN EXHIBIT.dwg Jan 15, 2019-10:40 am



- NOTES:**
1. ALL PLAYCOURT STRIPING WILL BE RE-STRIPED AND RE-PAINTED AS EXISTING.
 2. SHOWN DETAILS ARE FOR REFERENCE ONLY. VERIFY ACTUAL DIMENSIONS AND COLORED FINISH ON-SITE.
 3. TYPICAL WHITE PAINT LINES ARE 3" WIDE.
 4. ALL DIMENSIONS ARE TO INSIDE EDGE OF LINE.

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION



QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
NO.	REVISION	DATE
	BY	APPRV'D
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

BREEN ELEMENTARY SCHOOL
2751 BREEN DRIVE,
ROCKLIN, CA 95765
PLAYCOURT STRIPING DETAILS

Sheet	C6
	8 of 9
	01/15/2019



TECHNICAL DATA SHEET
STEELGUARD

A single package, water dispersed polymer modified, slate and mineral filled, black, asphalt coating. The product, following minimal dilution with potable water, may be easily applied by squeegee or spray applied with proper, heavy duty commercial equipment. It is designed to restore minor pavement surface profile loss; and to professionally seal all asphalt surfaces against accelerated deterioration from sun, wind, rain, tire abrasion and mild chemical attack.

Available in 5 and 55 gallon containers; and in bulk.

ADVANTAGES:

- May be applied above 50°F (10°C) and rising on most dry or slightly damp surfaces. (May be applied in cooler temperatures with the use of fast drying additives or under favorable conditions - See "Drying").
- SteelGuard provides excellent coverage with a higher film thickness per coat due to higher aggregate/binder content. Helps fill minor surface (non-working) cracks in the pavement to eliminate water penetration.
- SteelGuard provides excellent adhesion.
- Excellent curing properties under normal conditions. Assists in nighttime installations without direct sun loading. Quick-setting additives are available for more challenging installations.
- Will resist re-emulsification once fully cured. Traffic striping immediately after curing may be achieved without discoloration.
- Resistant to tire scuff and power steering abuse.
- Contains no bio-accumulative metals or chemicals. Non-hazardous in cured form; therefore, may be disposed as cured residue into any municipal land fill.

USES:

- Designed for application as a professional protective coating of asphalt pavements including driveways, playgrounds, parking lots, bike paths, surface streets, highways and airport taxiways and runways.
- Available in modified forms for various color applications, skid resistant requirements or for applications in demanding situations or on alternative surface materials.

APPLICATION:

Apply only onto clean, dry or damp surfaces from which all contaminants have been removed; i.e. built-up crankcase drippings, oil spots, loose traffic paint, etc. Areas upon which a high build-up of grease or loose paint exists shall be scraped, wire brushed and cleaned to eliminate oil residue from the underlying, sound asphaltic substrate. Prior to application it is recommended that these treated areas be further prepared by surface priming with an approved Oil Spot Treatment.

SteelGuard may be modified for special applications with a variety of polymers, adhesion packages, set control additives and select size aggregates for friction/skid promotion. Please contact your supplier for details.

SHIPPING INFORMATION:

CONTAINER SIZE	UNITS PER PALLET	CUBIC FT PER PALLET	WEIGHT PER PALLET	PALLETS PER 48' TRAILER
5 Gallon Pails	32	50	~ 1950	18
55 Gallon Drums	4	58	~ 2500	20

PHYSICAL PROPERTIES:

Water Absorption	< 1%	ASTM D-570
Weight per gallon	10.5 - 11.5 lbs/gallon	ASTM D-1475
Percent Solids	57 - 62	
Wet Track Abrasion	<35 grams / s.f.	ISSA A-105, T-100
VOC	< 10 grams / liter	BAAQMD Vol 3 Lab 22

SteelGuard contains 4.5 pounds of crushed aggregate, or more, per gallon and is supplied in a high viscosity, semi-paste consistency. The formula is balanced to provide suspension of the aggregate particles but stirring or mixing should be done prior to use to assure a balanced mix.

Immediately prior to application a pre-determined, small quantity of potable water shall be slowly mixed into the contents at an equivalent rate of one to five percent by volume (1 - 5% under normal conditions; up to as much as 10% under very hot conditions) of the **SteelGuard**.

Do not over dilute this product as this will terminate the anti-settling qualities of the **SteelGuard** and could possibly diminish the useful qualities of its cured physical properties.

DRYING: *SteelGuard* is one of the fastest curing pavement surfacing materials available. However, all waterborne curing rates are dependent upon evaporation of the water contained within the formula. The combined effects of surface temperature, air temperature, sun load, wind and humidity will determine the atmospheric water removal capabilities at any given moment. The professional installer will gain valuable experience in gauging time-to-cure by observing cure times against spread rates within the range of these five indicators.

Do not apply this product unless sufficient weather conditions exist to assure full cure prior to being subjected to rain, fog or other inclement weather or heavy traffic.

It is recommended that the inexperienced applicator use spread rates of 20 gallons per 1000 square foot, during daylight hours, at surface and air temperatures above 55° F (13°C) and rising with no rain, fog or other inclement weather in the forecast for at least 24 hours.

Immediately after application, clean implements, including hoses, with cool water after application. **SteelGuard** may crosslink & cure if left standing in sun exposed spray hoses.

TRANSPORTATION, STORAGE AND HANDLING:

- DOT: not regulated
- Keep/store out of direct sunlight.
- Do not allow to freeze prior to application.
- Do not mix with any other products.
- Keep containers tightly sealed when not in use.
- Avoid prolonged skin contact.
- Do not take internally. Do not induce vomiting if swallowed - call a physician immediately.
- Store, handle and dispose per MSDS requirements.

POLYMER MODIFIED SEAL COAT



PRODUCT DATA SHEET
SUPERFLEX HT
PART NO. 34533

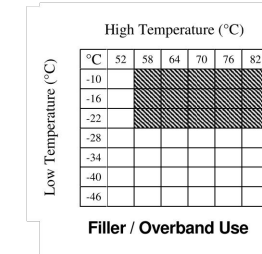
SEPTEMBER 2016

6165 W Detroit St. • Chandler AZ 85226
+1 (602) 276-0406 • +1 (800) 528-8242 • FAX +1 (480) 961-0513
www.crafco.com

READ BEFORE USING THIS PRODUCT

GENERAL Crafco Superflex HT sealant is a hot-applied asphalt based product used to fill cracks in asphalt concrete or Portland cement concrete pavements in moderate to very hot climates. Superflex HT is supplied in solid form which when melted and properly applied forms an adhesive and flexible compound that resists cracking in the winter and is highly resistant to tracking or pick-up by vehicle tires in hot climates. Superflex HT is used in highway, street, airfield and parking lot pavements and is applied to pavement cracks using either pressure feed melter applicators or pour pots. At application temperature, Superflex HT is a low viscosity, self-leveling product which easily penetrates narrow cracks. Superflex HT can be melted in jacketed double type melting units, or in small direct bottom fired types of melters. Both melter types must have sufficient agitation and temperature indicating devices to assure that the material is heated to and maintained within the specified application temperature range of 380° to 400°F (193 to 204°C). VOC = 0 g/l.

USAGE GUIDELINES Superflex HT is applicable for Filler/Overband Use in moderate to very hot climates with high and low pavement temperatures identified in the chart. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBIND V 3.1, and sealant or filler use is determined following Crafco Product Selection procedures.



Applicable Pavement Temperatures

SPECIFICATION CONFORMANCE Crafco Superflex HT meets the following requirements when heated to the maximum heating temperature in accordance with ASTM D5167:

Tests	Specification Limits
Softening Point (ASTM D36)	210°F (99°C) min.
Flexibility, 1/8" (3.2 mm) specimen, 90° bend, 10 sec., 1" (25mm) mandrel (ASTM D3111 modified)	Pass at 0°F (-18°C)
Cone Penetration (ASTM 5329)	45 max.
Flow, 140°F (60°C), 5 hr. (ASTM D5329)	0 mm.
Elongation 77°F (25°C) (ASTM D412 die C)	1000% min.
Opening to Traffic Time	30 minute max.
Maximum Heating Temperature	400°F (204°C)
Application Temperature Range	380-400°F (193-204°C)

INSTALLATION The unit weight of Crafco Superflex HT is 9.2 lbs./gal. (1.10 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Superflex Sealants to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of sealant

PACKAGING Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x 102 cm) 4-way pallets; can be stored outside; and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.
 o **BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
 o **PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

WARRANTY CRAFTCO, Inc. warrants that CRAFTCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**

©2016, Crafco, Inc., #A1143

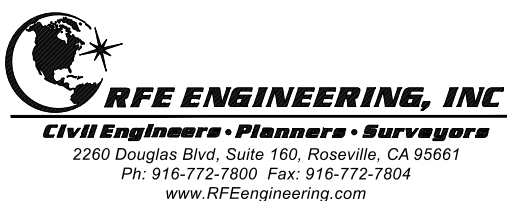
HOT-APPLIED RUBBERIZED CRACK SEALANT

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\3 BREEN\CI-C7 BREEN EXHIBIT.dwg, Jan 15, 2019-10:40:40 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2



ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

BREEN ELEMENTARY SCHOOL
2751 BREEN DRIVE,
ROCKLIN, CA 95765
MATERIAL SPECIFICATONS

Sheet
C7
9 of 9
01/15/2019

NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK

GRANITE OAKS MIDDLE SCHOOL PAVEMENT REHABILITATION PLANS

2600 WYCKFORD BLVD,
ROCKLIN, CA 95765



LIMITS OF IMPROVEMENTS
SCALE: 1"=200'



VICINITY MAP
NOT TO SCALE

SHEET INDEX:

- C1 TITLE SHEET
- C2.1-C2.3 GENERAL NOTES
- C3 AC PAVEMENT REMOVAL, AND REPLACEMENT PLAN
- C4 CRACK FILL, SEAL COAT, AND STRIPING PLAN
- C5 AC PAVEMENT REPAIR DETAILS
- C6 PLAYCOURT STRIPING DETAILS
- C7 MATERIAL SPECIFICATIONS

OWNER:

CRAIG ROUSE
ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DRIVE,
ROCKLIN, CA 95677
PH: (916) 630-2246

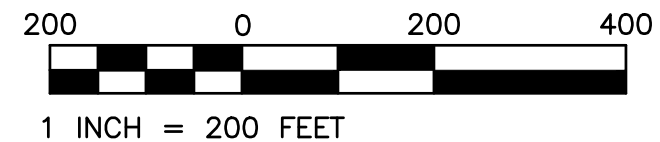


Know what's below.

Call before you dig.
or (800) 227-2600

NOTICE TO CONTRACTOR :

THIS SET IS BASED ON AERIAL PHOTOGRAPHY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING INFORMATION SHOWN ON THESE PLANS IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING SITE CONDITIONS. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR MUST ALSO CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.



**PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION**

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

**ROCKLIN UNIFIED
SCHOOL DISTRICT**
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

GRANITE OAKS MIDDLE SCHOOL
2600 WYCKFORD BLVD,
ROCKLIN, CA 95765
TITLE SHEET

Sheet

C1

1 of 9

01/15/2019

TECHNICAL SPECIFICATIONS:

TS-1 THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER.

TS-2 NOTIFICATIONS
IN ORDER TO ALLOW THE OWNER SUFFICIENT TIME TO NOTIFY THE VARIOUS OCCUPANTS OF UPCOMING WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AT LEAST TEN (10) WORKING DAYS BEFORE COMMENCING WORK ON ANY PORTION OF THE WORK.

TS-3 PROTECTION OF EXISTING INSTALLATIONS
THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING INSTALLATIONS FROM DAMAGE RESULTING FROM THE OPERATION OF EQUIPMENT OR PLACEMENT OF MATERIAL. SUITABLE PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXPOSED SURFACES FROM DISCOLORATION RESULTING FROM THE APPLICATION OF ASPHALTIC MATERIALS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, AT NO EXTRA COST TO THE OWNER, TO PROVIDE SUITABLE MEANS OF DUST CONTROL RESULTING FROM HIS PERFORMANCE OF THE WORK. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

TS-4 CONTROL OF MATERIALS
ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED IN A WORKMANLIKE MANNER. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE AREAS OF WORK SHOWN ON THE PLANS.
THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO VERIFY WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER.
INITIAL TESTING DONE TO DETERMINE SPECIFICATION COMPLIANCE WILL BE PERFORMED AND PAID FOR BY THE OWNER. IF ANY PARTICULAR PORTION OF THE WORK DOES NOT PASS THIS TESTING, IT SHALL BE SUBJECT TO A RETEST AFTER THE CONTRACTOR FEELS HE HAS REMEDIATED THE DEFICIENCY. ALL RETESTING WILL BE PAID FOR BY THE CONTRACTOR.
IN THE EVENT THAT THE OWNER DOES NOT PROVIDE ON-SITE INSPECTION DURING CONSTRUCTION, THE CONTRACTOR IS HEREBY NOTIFIED THAT TWO OR MORE CORE TESTS WILL BE TAKEN TO CHECK FOR COMPLIANCE TO THESE SPECIFICATIONS. IF DEFICIENCIES IN MATERIAL QUALITY, THICKNESS, OR DENSITIES ARE DETERMINED, THE ENTIRE AREA REPRESENTED BY THAT TEST SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. IN ADDITION, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ADDITIONAL TESTING TO DETERMINE COMPLIANCE OF ALL OTHER AREAS TESTED. ALL NON-COMPLYING AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

TS-5 WORK SCHEDULE AND PUBLIC SAFETY
FIVE (5) DAYS PRIOR TO INITIATING THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE OF WORK TO THE ENGINEER FOR HIS REVIEW. THE PLAN SHALL CLEARLY INDICATE HOW THE WORK IS TO BE LAID OUT AND THE ORDER IN WHICH INDIVIDUAL AREAS WILL BE COMPLETED. THE GOAL OF THIS REQUIREMENT IS TO ENSURE THAT PUBLIC TRAFFIC IS SAFELY MAINTAINED AND THAT THERE IS ADEQUATE PUBLIC ACCESS TO THE SITE.
CONTRACTOR IS RESPONSIBLE FOR BARRICADING OR TAPING OFF THE WORK TO BE COMPLETED EARLY ENOUGH IN ADVANCE TO ASSURE NO VEHICLES OR OTHER OBSTACLES ARE LEFT IN THE WAY OF CONSTRUCTION.

TS-6 TRAFFIC CONTROL
CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL NECESSARY TO MAINTAIN PUBLIC SAFETY AND ACCESS TO THE PROJECT SITE. PREAPPROVAL BY THE ENGINEER IS REQUIRED BEFORE IMPOSING ANY TRAFFIC CLOSURES. TRAFFIC CONTROL MAY INVOLVE FLAGMEN, GUARDS, BARRICADES, SIGNS, LIGHTS, FLARES, RADIOS, AND OTHER FACILITIES.
THE CONTRACTOR SHALL INCLUDE TRAFFIC CLOSURES IN THE PROPOSED WORK SCHEDULE SUBMITTAL AS DESCRIBED IN SECTION TS-5, "WORK SCHEDULE, AND PUBLIC SAFETY."

TS-7 DUST CONTROL
THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.

TS-8 BEFORE EXECUTION OF ANY WORK, THE CONTRACTOR SHALL EXAMINE ACTUAL JOB CONDITIONS AND REPORT TO RFE ENGINEERING, INC. ANY ERROR, OMISSION, OR DISCREPANCY AFFECTING WORK. UPON COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO RFE ENGINEERING, INC. IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER OR CITY ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. ANY COST INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TS-9 THE CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK THAT IS CONSTRUCTED.

TS-10 THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER "AS BUILT" DRAWINGS AT PROJECT COMPLETION. THE CONTRACTOR SHALL PROVIDE ONE COMPLETE ACCURATE SET OF RECORD CHANGES. THE CHANGES SHALL BE PLACED ON A CLEAN SET OF PROJECT DRAWINGS IN RED, AND GIVEN TO THE ENGINEER AT JOB COMPLETION.

TS-11 THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE QUANTITIES FOR BID AND FIELD INSTALLATION.

TS-12 THESE DRAWINGS ARE FOR THIS SPECIFIC PROJECT AND NO OTHER USE IS AUTHORIZED. RFE ENGINEERING, INC. DISCLAIMS ALL RESPONSIBILITY FOR CONSTRUCTION BEYOND WHAT IS SPECIFICALLY DESIGNED OR DETAILED HEREIN.

TS-13 EROSION CONTROL NOTES
EROSION AND SEDIMENTATION CONTROL PROGRAM: THE LOCATION OF EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THESE PLANS MAY VARY ACCORDING TO THE SEASON AND PHASE OF CONSTRUCTION. THE OBJECTIVE OF THESE MEASURES IS TO MITIGATE THE EROSION AND SEDIMENTATION IMPACTS.

MAINTENANCE PROGRAM: THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE EROSION AND SEDIMENTATION MITIGATION MEASURES ON ALL DISTURBED AREAS BEFORE, DURING, AND AFTER STORMS. THE CONTRACTOR SHALL ENSURE THAT THE EROSION AND SEDIMENTATION MEASURES ARE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS.

INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. WINTERIZATION AND EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

TS-14 DEMOLITION PLAN NOTES
SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION. ENGINEER SHALL VERIFY LIMITS OF DEMOLITION. PROTECT EXISTING PAVEMENT THAT WILL REMAIN.

THE DISPOSAL OF ALL DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS. ANY PERMITS REQUIRED FOR SUCH DISPOSAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.

EXISTING MATERIALS (I.E. IRRIGATION, ELECTRICAL) TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

TS-15 FULL-DEPTH AC PAVEMENT REPAIR OR RECONSTRUCTION

GENERAL
AREAS DESIGNATED BY THE ENGINEER SHALL BE DUG OUT TO A DEPTH AS SHOWN ON THE PLANS, REMOVED AND REPLACED WITH THE SAME THICKNESS OF AC, UNLESS OTHERWISE DIRECTED ON THE CONTRACT PLANS. THE AC SHALL BE PLACED IN TWO (2) EQUAL LIFTS. THE FINAL LIFT MUST BE 1.5 INCHES THICK OR GREATER. **THE COMMON PRACTICE OF CAPPING DIGOUTS WITH A THIN LIFT OF ASPHALT IS NOT ACCEPTABLE.**

MATERIALS
THE ASPHALT CONCRETE USED FOR THIS WORK SHALL CONFORM TO ALL REQUIREMENTS OF **SECTION TS-17**, "ASPHALT CONCRETE," OF THESE TECHNICAL SPECIFICATIONS.
TACK COAT EMULSION SHALL BE SS-1H.

CONSTRUCTION
THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR DISPOSAL OF EXCAVATED MATERIALS.
ALL EDGES SHALL BE SAW-CUT OR MILLED. IF A MILLING MACHINE IS USED, ALL SLOPING EDGES SHALL BE CHIPPED TO A VERTICAL FACE. EXPOSED EDGES SHALL BE PROTECTED AGAINST BREAKAGE WITH TIMBERS OR AC MIX WHENEVER A ROLLER ENTERS OR LEAVES THE REPAIR SPOT.

THE UNDERLYING MATERIAL TO REMAIN IN PLACE SHALL BE RECOMPACTED TO 95 PERCENT MINIMUM RELATIVE COMPACTION AS DETERMINED BY AASHTO TESTS T180 AND T238 TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE REPAIR. AFTER COMPACTION AND PRIOR TO THE PLACING OF ASPHALT CONCRETE, THE VERTICAL EDGES OF THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT.
WHENEVER THE SURFACE COURSE OF AC IS PLACED MORE THAN FOUR HOURS AFTER THE BASE COURSE OR, IN THE OPINION OF THE ENGINEER, CONTAMINATION BY DIRT OR DUST HAS CAUSED THE BASE COURSE TO LOSE ITS TACKINESS, A TACK COAT SHALL BE APPLIED TO THE ENTIRE AREA OF THE REPAIR BEFORE PLACING THE SURFACE COURSE. TACK COAT SHALL BE APPLIED AT A RATE EQUIVALENT TO 0.05 TO 0.15 GALLONS PER SQUARE YARD.
THE FINISHED REPAIR SHALL CONFORM TO THE SURROUNDING GRADE AND CONTOUR AND SHALL NOT TRAP WATER OR PRESENT A VISIBLE HUMP.

ASPHALT CONCRETE SHALL BE COMPACTED TO A MINIMUM 93 PERCENT OF MAXIMUM THEORETICAL DENSITY (DENSITY WITH ZERO AIR VOIDS) AS DETERMINED BY AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) D-2041.

UNSUITABLE MATERIAL
IN THE EVENT THAT THE UNDERLYING MATERIAL IS UNSUITABLE, IT SHALL BE EXCAVATED BELOW THE DEPTH REQUIRED ABOVE AND DISPOSED OF IN ACCORDANCE WITH THESE SPECIAL PROVISIONS. THE LIMITS OF REMOVAL SHALL BE DESIGNATED BY THE ENGINEER. THE RESULTING SPACE SHALL BE FILLED WITH A SINGLE LIFT OF ASPHALT CONCRETE.

UNSUITABLE MATERIAL IS DEFINED AS MATERIAL THE ENGINEER DETERMINES TO BE:

- a. OF SUCH UNSTABLE NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS AT OPTIMUM MOISTURE CONTENT; OR
- b. TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE IN-PLACE DRYING PRIOR TO INCORPORATION INTO THE WORK; OR
- c. OTHERWISE UNSUITABLE FOR THE PLANNED USE.


TS-16 TACK COAT
AN ASPHALT EMULSION TACK COAT SHALL BE APPLIED TO ALL VERTICAL SURFACES OF EXISTING PAVEMENT, CURBS, GUTTERS, AND CONSTRUCTION JOINTS, AGAINST WHICH ADDITIONAL MATERIAL IS TO BE PLACED.
ADDITIONALLY, WHEN PLACING AN OVERLAY WITHOUT FABRIC, THE TOP LIFT OF A FULL-DEPTH AC REPAIR, OR AC LEVELING, PAVING SHALL BE PRECEDED BY A TACK COAT OVER THE ENTIRE SURFACE UNLESS THE EXISTING SURFACE HAS BEEN PLACED WITHIN THE LAST FOUR HOURS AND, IN THE OPINION OF THE ENGINEER, IS CLEAN ENOUGH TO BOND WITHOUT THE NEED FOR A TACK COAT.
THE TACK COAT SHALL BE SS-1H, MEETING THE REQUIREMENTS OF SECTION 94 OF THE STATE STANDARD SPECIFICATIONS. FULL COMPENSATION FOR FURNISHING AND APPLYING ASPHALT EMULSION TACK COAT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEMS INVOLVING ASPHALT CONCRETE.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\AC1-C7 GRANITE OAKS EXHIBIT.dwg, 15, 2019-01-31, 01:52, .pnt

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1
0	1/2	1
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK



RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

GRANITE OAKS MIDDLE SCHOOL
2600 WYCKFORD BLVD,
ROCKLIN, CA 95765
GENERAL NOTES

Sheet
C2.1
2 of 9
01/15/2019

TS-17 ASPHALT CONCRETE

GENERAL

THE FOLLOWING PROVISIONS FOR ASPHALT CONCRETE MATERIAL SHALL APPLY TO WORK COMPLETED WITHIN THESE SPECIFICATIONS.

MATERIALS

ASPHALT CONCRETE SHALL COMPLY WITH THE PROVISIONS OF SECTION 39 OF THE CALIFORNIA STATE STANDARD SPECIFICATIONS AND AS MODIFIED HEREWITH. THE REQUIREMENTS PROVIDED WITHIN THESE SPECIAL PROVISIONS SHALL SUPERSEDE STATE SPECIFICATIONS WHERE CONFLICTS OR OTHER DISPARITIES EXIST. THE USE OF AGGREGATE SOURCE STEMMING FROM BEAR RIVER OR ANY SIMILAR SOURCE OF AGGREGATE THAT IS KNOWN TO CONTAIN A SIGNIFICANT AMOUNT OF QUARTZITE MATERIAL IS NOT TO BE USED IN PRODUCTION OF ASPHALT CONCRETE MATERIALS FOR THIS PROJECT.

ASPHALT CONCRETE SHALL BE HOT PLANT MIXED AND SHALL BE FURNISHED FROM THE PLANT AT A TEMPERATURE NOT TO EXCEED 325 DEGREES F.

ASPHALT CONCRETE FOR PAVING WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED, STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

ASPHALT CONCRETE FOR PAVEMENT REPAIR WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A **PG 64-10 VISCOSITY GRADED; STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.**

THE ACTUAL ASPHALT CEMENT CONTENT MAY VARY UP TO 0.3% PLUS/MINUS FROM THE TARGET OPTIMUM BITUMEN CONTENT (OBC) UNLESS THE JOB-MIX-DESIGN AND FINAL PRODUCT INDICATE THE REQUIRED PROVISIONS ARE NOT MET.

NOTE: AT THE OBC, THE COMPACTED MIXTURE SHALL HAVE THE FOLLOWING PROPERTIES:

HVEEM STABILITY 35 MIN. TYPE B
37 MIN. TYPE A

THE SUGGESTED JOB-MIX-DESIGN AIR VOIDS BELOW ARE PROVIDED TO HELP OBTAIN COMPACTION REQUIREMENTS IN THE FIELD AND ARE NOT A SPECIFICATION REQUIREMENT.

AIR VOIDS 3% TO 5%

ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED TO INDUSTRY STANDARDS.

SUBMITTALS

THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER FOR REVIEW AND APPROVAL, AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, A LIST OF HIS SOURCES OF MATERIALS TOGETHER WITH A CERTIFICATE OF COMPLIANCE, INDICATING THAT MATERIALS TO BE INCORPORATED IN THE WORK FULFILL THE REQUIREMENTS OF THESE SPECIFICATIONS AND THE JOB-MIX-DESIGN FOR THE ASPHALT CONCRETE. THE CERTIFICATE OF COMPLIANCE SHALL BE SIGNED BY THE MATERIAL SUPPLIER OR HIS REPRESENTATIVE. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE PAVED AREAS SHOWN ON THE PLANS.

AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, THE CONTRACTOR SHALL ALSO FURNISH A **JOB-MIX-DESIGN** FOR THE ASPHALT CONCRETE. THE JOB-MIX-DESIGN SHALL INDICATE ALL OF THE FOLLOWING:

1. PERCENTAGE PASSING EACH SIEVE SIZE
2. PERCENT ASPHALT RECOMMENDED
3. PERCENT VOIDS*
4. STABILITY*
5. MAXIMUM THEORETICAL UNIT WEIGHT*

THE * ITEMS SHALL BE PROVIDED AT EACH ASPHALT CONTENT USED TO ARRIVE AT THE RECOMMENDED OPTIMUM BITUMEN CONTENT.

THE JOB-MIX-DESIGN SHALL BE IN EFFECT UNTIL A CHANGE IS APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

TS-18 ADJUST UTILITY COVERS

STORM DRAIN AND SEWER MANHOLE COVERS, CLEANOUTS, WATER VALVE COVERS, UTILITY VAULT AND OTHER SUCH UTILITY ACCESS COVERS, WITHIN AREAS TO BE PAVED WITH ASPHALT CONCRETE SHALL BE ADJUSTED BY THE CONTRACTOR TO THE NEW FINISHED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE NUMBER OF UTILITY COVERS TO BE ADJUSTED, ACCURATELY REFERENCING ALL COVERS PRIOR TO PAVING AND ADJUSTING THE COVERS AFTER PAVING HAS BEEN COMPLETED.

CUTTING OF THE NEW PAVEMENTS TO MAKE UTILITY COVER ADJUSTMENTS SHALL BE ACCOMPLISHED WITHOUT DISTURBING OR DEFORMING ASPHALT CONCRETE THAT IS TO REMAIN. DEFORMED ASPHALT CONCRETE SHALL BE REMOVED AND REPAIRED AS DIRECTED BY THE ENGINEER.

UNLESS OTHERWISE SPECIFIED BY THE UTILITY OWNER, COVER FRAMES ARE TO BE SET TO GRADE AND BACKFILLED TO WITHIN 1 1/2 INCHES OF THE FINISHED SURFACE WITH PORTLAND CEMENT CONCRETE. ASPHALT CONCRETE CONFORMING TO THE PROVISIONS IN SECTION TS-11 OF THESE TECHNICAL SPECIFICATIONS SHALL BE USED TO COMPLETE THE RESTORATION TO THE NEW FINISHED SURFACE. SURFACE TOLERANCES AS SPECIFIED FOR ASPHALT CONCRETE OVERLAY SHALL APPLY TO THE RESTORATION OF PAVING SURFACES, INCLUDING THE POSITIONING OF UTILITY COVERS AND FRAMES.

TS-19 SURFACE SEAL COAT (TWO COATS)

GENERAL

THIS WORK SHALL CONSIST OF PREPARING THE SURFACE OF EXISTING ASPHALT CONCRETE PAVEMENT AND APPLYING A SEAL COAT COMPOSED OF A PETROLEUM ASPHALT EMULSION, LATEX POLYMER, AND MINERAL AGGREGATE. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS FOR DOING ALL OF THE WORK NECESSARY TO SEAL COAT THE AREAS DESIGNATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED MUST BE ERADICATED PRIOR TO THE SEAL COAT APPLICATION.

MATERIALS

THE ASPHALT EMULSION SEAL COAT MATERIAL TO BE FURNISHED AND APPLIED BY THE CONTRACTOR SHALL BE **RAYNGUARD "STEELGUARD" PAVEMENT SEALER**, OR APPROVED EQUAL. **NOTE: COAL TAR EMULSION AND GILSONITE PRODUCTS ARE NOT ACCEPTABLE.**

SEAL COAT MATERIAL DELIVERED FOR USE ON THE WORK SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

1. RESIDUE AT 300 - 400 DEGREES F., % 60 - 70
2. DEHYDRATION, 96 HOURS AT 100 DEGREES F. 0.6 MIN
3. SOLUBILITY OF RESIDUE IN C2HCL 15 - 20
4. LOSS ON IGNITION OF INSOLUBLE RESIDUE % 16 MAX
5. CONE PENETRATION AT 77 DEGREES F., DMM 400 - 700

MIX DESIGN COMPOSITION:

FIRST APPLICATION

100 GALLONS SEAL COAT MATERIAL
300 POUNDS SILICA SAND (30 MESH) (IF NOT INCLUDED IN SEAL MATERIAL)
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF PORTABLE WATER FOR DILUTION

SECOND APPLICATION

100 GALLONS SEAL COAT MATERIAL
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF POTABLE WATER FOR DILUTION

DILUTION OF SEAL MATERIAL WITH WATER FOR EASE OF APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ANY WATER ADDITION SHALL BE CAREFULLY MEASURED INTO A KNOWN VOLUME OF SEAL MATERIAL. AGGREGATE SHALL BE EITHER NATURAL OR MANUFACTURED PRODUCT COMPOSED OF CLEAN, HARD, DURABLE PARTICLES FREE FROM DIRT, ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A CERTIFICATE FROM THE SUPPLIER OF THE SEAL COAT MATERIAL GIVING THE TRADE NAME OF THE SEALER AND VERIFICATION THAT THE SEALER CONFORMS TO THESE SPECIFICATIONS.

APPLICATION

THE SURFACE TO BE SEALED SHALL BE CLEANED TO REMOVE ALL ORGANIC MATERIALS, SAND, DUST, AND CLAY. PRIOR TO PLACING THE SEAL, CRACKS SHALL BE FILLED, AND ALL AREAS CAPABLE OF PONDING WATER GREATER THAN 3/8 INCH IN DEPTH SHALL BE PRE-LEVELLED AS NECESSARY TO ELIMINATE THE POSSIBILITY OF STANDING WATER.

BEFORE PLACING THE SEAL, ALL AREAS OF WATER DAMAGED (RAVELED) PAVEMENT IN EXCESS OF 1/8 INCH REMOVED ASPHALT CONCRETE SHALL RECEIVE ONE PRECOAT OF UNDILUTED EMULSIFIED ASPHALT SEAL MATERIAL WITH 5 POUNDS OF SAND PER GALLON OF SEAL. THE PRECOAT SHALL FILL THE RAVELED PAVEMENT AND PROVIDE A SMOOTH, NEAT SURFACE PRIOR TO PLACEMENT OF THE TWO COATS OF DILUTED SEAL MATERIAL.

ACCUMULATIONS OF OIL AND GREASE THAT MAY ADVERSELY AFFECT SEAL COAT BONDING SHALL BE REMOVED BY GRINDING, SCRAPING, OR SCRUBBING WITH TRISODIUM PHOSPHATE OR AN EQUALLY EFFECTIVE INDUSTRIAL DETERGENT. PAVEMENT AREAS REDUCED BY GRINDING SHALL RECEIVE A TACK COAT AND SKIN PATCH OF 1/4 INCH AC MIX. PAVEMENT AREAS CLEANED WITH DETERGENT SHALL BE THOROUGHLY RINSED WITH WATER AND ALLOWED TO DRY. PRIOR TO SEAL COATING, THE CLEANED AREAS SHALL BE TREATED WITH A PROPRIETARY OIL STAIN PRE-TREATMENT OR A 1:1 SOLUTION OF ISOPROPYL ALCOHOL AND SHELLAC.

SEAL SHALL NOT BE APPLIED TO A WET SURFACE NOR WHEN RAIN OR FREEZING WEATHER IS EXPECTED WITHIN 24 HOURS. AIR AND PAVEMENT TEMPERATURE AT TIME OF APPLICATION SHALL BE BETWEEN 60 AND 95 DEGREES F. AND NO SEAL COAT SHALL BE APPLIED WHEN THE AIR TEMPERATURE IS 60 DEGREES F OR LESS. ALSO, OTHER CONDITIONS ARE AS FOLLOWS:

MINIMUM FOUR (4) HOURS OF SUNSHINE EXPECTED IN NEXT TEN (10) HOURS, RELATIVE HUMIDITY BELOW 50% AND WIND SPEED MINIMUM OF FIVE (5) MILES PER HOUR.

THE CONTRACTOR MAY, BASED ON HIS OWN EXPERIENCE, APPLY SEAL COAT DURING FAVORABLE DRYING CONDITIONS WHEN ONE MAJOR POSITIVE FACTOR IN DRYING SUCH AS SUNSHINE, SURFACE TEMPERATURE, HIGH AIR TEMPERATURE, OR LOW HUMIDITY COMPENSATE FOR OTHER NEGATIVE FACTORS. PRIOR TO PLACING THE FIRST COAT OF SEAL COAT IN EXCEPTIONALLY HOT WEATHER, THE SURFACE SHALL BE DAMPENED WITH WATER. ALL EXCESS WATER SHALL BE REMOVED TO LEAVE THE SURFACE ONLY SLIGHTLY DAMP.

Z:\2018 Projects\18113_Rocklin_Schools_Pavement_Evaluation\WORKING CAD\9 GRANITE OAKS\C1-C7 GRANITE OAKS EXHIBIT.dwg, dm, 18, 2019-08-30, 08:53 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>GRANITE OAKS MIDDLE SCHOOL 2600 WYCKFORD BLVD, ROCKLIN, CA 95765</p>	<p>Sheet C2.2</p>				
									<p>3 of 9</p>				
									<p>GENERAL NOTES 01/15/2019</p>				
NO.	REVISION	DATE	BY	APPRV'D	QUANT.	DRAWN	PGC	RFE	DESIGN	PGC	RFE	BY	CHECK

TS-20 EMULSIFIED ASPHALT CRACK SEAL

GENERAL

THIS WORK APPLIES TO ALL CRACKS AND JOINTS IN AND ADJACENT TO THE ASPHALT CONCRETE PAVEMENT AS INDICATED ON THE PLANS. FOR CRACKS AND JOINTS 1/4 INCH AND WIDER, THE WORK CONSISTS OF CLEANING, STERILIZING WHERE WEEDS ARE PRESENT, FILLING WITH EMULSIFIED ASPHALT CRACK SEAL AND COVERING WITH SAND. FOR CRACKS AND JOINTS LESS THAN 1/4 INCH WIDE, THE WORK CONSISTS ONLY OF WEED CLEANING AND STERILIZATION.

NO ROUTING OF PAVEMENT IS REQUIRED FOR THIS PROJECT.

MATERIALS

CRACK SEAL SHALL BE AN EMULSIFIED MATERIAL THAT CAN BE READILY HANDLED AT AMBIENT TEMPERATURES, CAN BE STORED FOR PERIODS OF UP TO SIX MONTHS, AND IS MADE WITH BASE MATERIALS THAT WILL REMAIN DUCTILE WITH AGING AND PROVIDE RESILIENCY UNDER EXTREME CLIMATIC CONDITIONS.

THE SEALANT SHALL CONTAIN NO VOLATILE ORGANIC COMPOUNDS WHICH CONTRIBUTE TO AIR POLLUTION AND SHALL CONFORM TO THE REQUIREMENTS IN THE FOLLOWING TABLE:

PROPERTY	TEST METHOD	REQUIREMENTS
VISCOSITY @ 77 F (25 C), SFS	ASTM D-244-76	25-150
PUMPING STABILITY	GB METHOD (1)	PASS
5-DAY SETTLEMENT TEST, PERCENT	ASTM D-244-76	5.0 MAXIMUM
CEMENT MIXING TEST, PERCENT	ASTM D-244-76	2.0 MAXIMUM
SIEVE TEST, PERCENT	ASTM D-244-76	0.1 MAXIMUM
PARTICLE CHARGE TEST	ASTM D-244-76	POSITIVE
RESIDUE, PERCENT	ASTM D-244-76 (MOD) (3)	62 MINIMUM
TEST OF RESIDUE	ASTM D-244-76	
VISCOSITY AT 140 F (60 C), CS.	ASTM D-244-76	1000-4000

NOTES:

- PUMPING STABILITY IS DETERMINED BY CHARGING 450 ML. OF EMULSION INTO A ONE-LITER BEAKER AND CIRCULATING EMULSION THROUGH A GEAR PUMP (ROPER 29 B22621) HAVING 1/4 INCH INLET AND OUTLET. THE EMULSION PASSES IF THERE IS NO SIGNIFICANT OIL SEPARATION AFTER CIRCULATING TEN MINUTES.
- TEST PROCEDURE IDENTICAL WITH ASTM D-244 EXCEPT THAT DISTILLED WATER SHALL BE USED IN PLACE OF TWO PERCENT SODIUM OLEATE SOLUTION.
- ASTM D-244 EVAPORATION TEST FOR PERCENT OF RESIDUE IS MODIFIED BY HEATING A 50 GRAM SAMPLE TO 300 F (149 C) UNTIL FOAMING CEASES, THEN COOLING IMMEDIATELY AND CALCULATING RESULTS.

THE VENDOR SHALL FURNISH CERTIFICATION THAT THE CRACK SEALANT MATERIAL COMPLIES WITH THE ABOVE REQUIREMENTS. SAND COVER SHALL BE FREE FROM CLAY OR ORGANIC MATERIAL AND SHALL BE OF SUCH SIZE THAT FROM 90 PERCENT TO 100 PERCENT WILL PASS A NO. 4 SIEVE AND NOT MORE THAN 10 PERCENT WILL PASS A NO. 200 SIEVE.

APPLICATION

IMMEDIATELY BEFORE APPLYING THE SEALANT, CRACKS AND JOINTS SHALL BE CLEANED BY MECHANICAL OR HAND METHODS FOLLOWED BY BLAST CLEANING WITH HIGH-PRESSURE AIR JETS TO REMOVE ALL RESIDUE AND FOREIGN MATERIAL TO A MINIMUM DEPTH OF THREE-QUARTER (3/4) INCH. WATER JETS SHALL NOT BE ALLOWED. CRACK SURFACES SHALL BE SURFACE DRY AT THE TIME THE SEALANT IS APPLIED.

CRACK SEALANT MATERIAL MAY BE SPREAD WITH ANY TYPE NOZZLE OR DEVICE THAT WILL PLACE THE MATERIAL WITHIN THE SPECIFIED TEMPERATURE RANGE AND TO THE DIMENSIONS SHOWN ON THE PLANS AND IS APPROVED FOR USE BY THE ENGINEER.

CRACK SEALANT SHALL BE PLACED AT A TEMPERATURE SUCH THAT THE SEALANT TEMPERATURE PLUS AIR TEMPERATURE FALLS WITHIN A RANGE OF 150 TO 200 DEGREES FAHRENHEIT.

WHEN CURED, CRACK SEALANT SHALL BE AT LEAST FLUSH WITH THE PAVEMENT SURFACE OR EXTEND NO MORE THAN ONE-EIGHTH (1/8) INCH ABOVE THE PAVEMENT SURFACE. **NOTE: THE COMMON PRACTICE OF "BAND-AIDING" A THICK RIBBON OF CRACK SEALANT TO THE PAVEMENT SURFACE IS NOT ACCEPTABLE.**

CRACKS SHALL BE COVERED WITH CLEAN SAND IMMEDIATELY FOLLOWING PLACEMENT OF THE SEALANT MATERIAL TO PREVENT TRACKING OF SEALANT BY VEHICLES OR PEDESTRIANS.

A LIGHT BROOMING SHALL BE PERFORMED TO REMOVE LOOSE SAND BEFORE TO THE END OF EACH DAY'S WORK OR AS A FIRST ORDER OF WORK ON THE MORNING FOLLOWING APPLICATION OF THE SAND COVER. THE EXACT TIME OF BROOMING WILL BE DETERMINED BY THE ENGINEER.

TS-21 PAINT MARKINGS

DESCRIPTION

THIS WORK SHALL CONSIST OF CONSTRUCTING PAINTED PARKING STALL LINES, TRAFFIC STRIPES, CURBS, LEGENDS, AND WALKWAY DELINEATION TO THE LAYOUT AND COLOR THAT EXISTED PRIOR TO COMMENCEMENT OF THE CONTRACT WORK, UNLESS OTHERWISE DIRECTED BY THE PROJECT PLANS OR BY THE ENGINEER. THIS WORK ALSO INCLUDES RETOUCHING PREVIOUSLY PAINTED SURFACES MARRIED BY CONSTRUCTION ACTIVITIES AND ERADICATING EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED. RESTRIPING IS NOT REQUIRED IN AREAS WITH NO CONSTRUCTION ACTIVITY UNLESS SPECIFICALLY NOTED.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO THE PROVISIONS OF SECTION **TS-20** OF THESE SPECIFICATIONS, TITLE III OF THE AMERICANS WITH DISABILITIES ACT AND ANY LOCAL CODES AS THOSE PROVISIONS RELATE TO RESTRIPING FOR HANDICAP ACCESS.

MATERIALS

PAINT FOR ASPHALT CONCRETE OR ASPHALT SEAL COATED SURFACES SHALL BE A WATER BORNE ACRYLIC AS MAY BE PERMITTED BY LOCAL AIR POLLUTION REGULATIONS, RAPID OR REGULAR DRY AT THE OPTION OF THE CONTRACTOR, COMMERCIALY AVAILABLE AND SPECIFIED BY THE MANUFACTURER AS BEING SUITABLE FOR MARKING AND STRIPING OF SEAL COATED AND NEW ASPHALT PAVEMENTS. PAINT FOR PORTLAND CEMENT SURFACES SHALL BE OIL BASED.

SURFACE PREPARATION

BEFORE APPLYING PAINT, THE PAVEMENT SURFACE SHALL BE CLEANED BY SWEEPING, BLOWING, VACUUMING, OR WASHING AS NECESSARY TO REMOVE MOISTURE, DIRT, OILS, GREASE, ACIDS, LAITANCE OR OTHER FOREIGN MATTER WHICH WOULD REDUCE THE BOND BETWEEN PAINT AND THE PAVEMENT.

CONTROL POINTS

THE CONTRACTOR SHALL LAY OUT ALL NECESSARY CONTROL POINTS FOR MARKINGS AND STRIPES.

MIXING

MECHANICAL MIXERS SHALL BE USED TO MIX PAINT. PRIOR TO APPLYING, THE PAINT SHALL BE MIXED TO UNIFORMLY BLEND PIGMENT AND SOLVENT TOGETHER, AND SHALL BE KEPT THOROUGHLY AGITATED DURING APPLICATION.

APPLICATION

ALL EQUIPMENT USED SHALL PRODUCE MARKINGS AND STRIPES OF UNIFORM QUALITY, TRUE TO LINE AND SPECIFIED THICKNESS.

PAINTED MARKINGS INCLUDING ARROWS, LEGENDS, STRIPING, AND CURBS ON ALL PAVEMENT SURFACES WITHIN THE AREA OF WORK ARE TO BE REPLACED WITH TWO (2) COATS OF PAINT. A CLEANING PRIOR TO SECOND COAT OR TRAFFIC CONTROL REQUIRED TO PROTECT THE PAINT SHALL BE INCLUDED IN THIS ITEM AT NO ADDITIONAL COST TO THE OWNER.

PAINTING SHALL BE APPLIED ONLY ON DRY SURFACE, WHEN TEMPERATURES ARE 50 DEGREES F., OR ABOVE, AND WHEN RAIN, FOG OR CONDENSATION WILL NOT CAUSE DAMAGE. PAINTING SHALL BE CEASED WHENEVER IT IS DETERMINED BY THE ENGINEER THAT WIND WILL PREVENT PROPER PAINT APPLICATION.

THE RATE OF PAINT APPLICATION SHALL BE ONE GALLON TO 125 SQUARE FEET, OR SUFFICIENT TO PRODUCE A WET FILM THICKNESS NOT LESS THAN 15 MILS.

THE CONTRACTOR SHALL PROVIDE NECESSARY PROTECTION FOR PAINTED SURFACES TO PROTECT FROM DAMAGE BY TRAFFIC AND PEDESTRIANS.

TS-22 WATERING

THE CONTRACTOR SHALL NOT DRAW WATER FROM ANY FIRE HYDRANT, EXCEPT TO EXTINGUISH A FIRE, WITHOUT FIRST OBTAINING PERMISSION (AND A METER IF REQUIRED) FROM THE WATER AGENCY CONCERNED.

FULL COMPENSATION FOR DEVELOPING WATER SUPPLY AND APPLYING WATER, INCLUDING WATER USED FOR ROLLERS, DUST CONTROL, AND CLEANUP, SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.

TS-23 CLEAN-UP

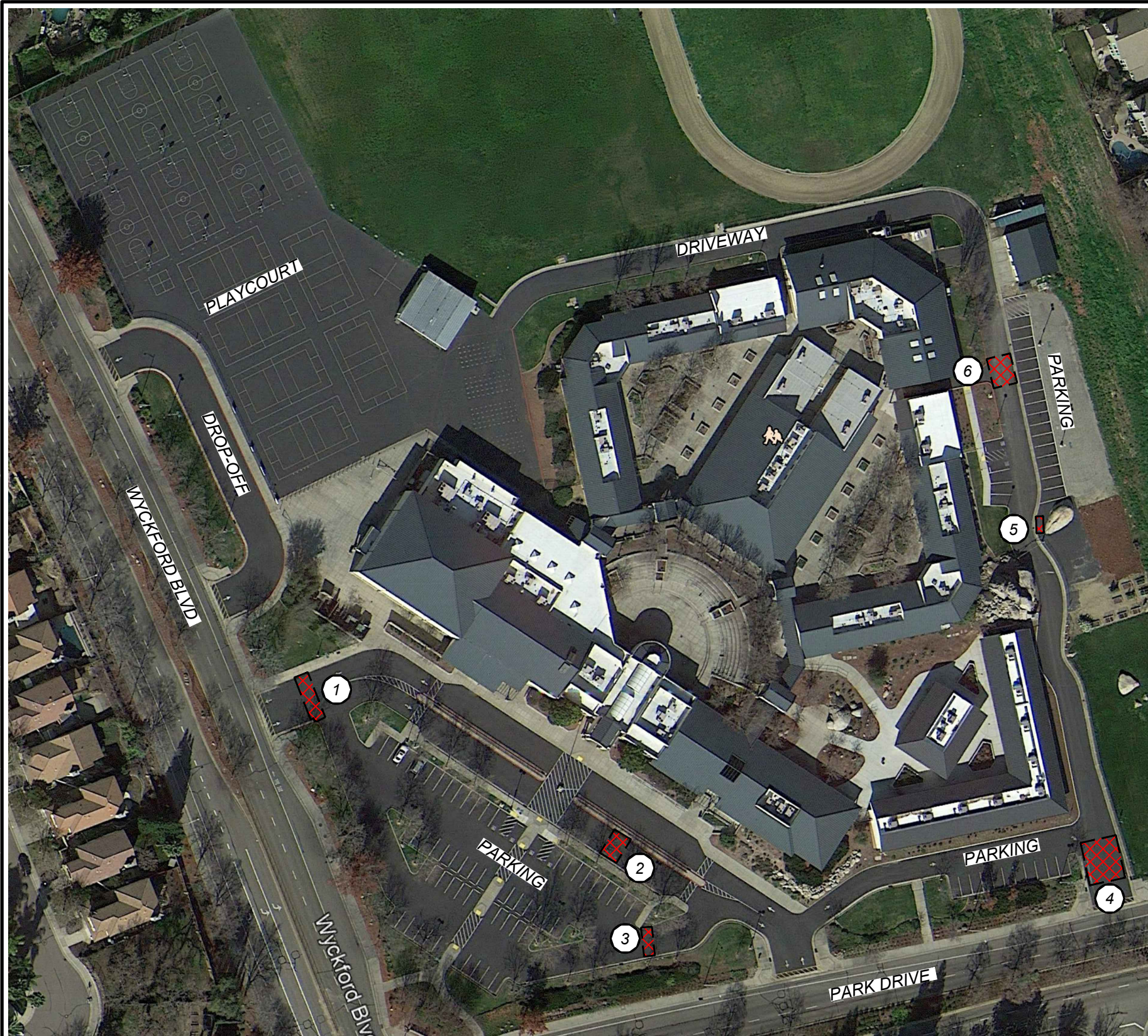
THE CONTRACTOR SHALL CLEAN UP THE JOBSITE PRIOR TO ACCEPTANCE OF THE WORK. ALL DIRT, SPOIL, AND DEBRIS OF ANY NATURE SHALL BE REMOVED AND THE ENTIRE SITE SHALL PRESENT A CLEAN, WORKMANLIKE APPEARANCE. ANY DAMAGE TO PAINT WORK, SPILLAGE, OR SPLATTERING FROM PRIME COATING, PAVING OR SEAL COATING OPERATIONS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\CI-C7 GRANITE OAKS EXHIBIT.dwg, Jan 15, 2019--01:52 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>GRANITE OAKS MIDDLE SCHOOL 2600 WYCKFORD BLVD, ROCKLIN, CA 95765</p> <p>GENERAL NOTES</p>	<p>Sheet C2.3</p>									
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>QUANT.</td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> </tr> </table>				QUANT.			DRAWN	PGC	RFE	DESIGN	PGC	RFE	<p>4 of 9</p>
QUANT.																		
DRAWN	PGC	RFE																
DESIGN	PGC	RFE																
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK			<p>01/15/2019</p>									

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\C1-C7 GRANITE OAKS EXHIBIT.dwg Jan 15, 2019--01:52 pm



LEGEND

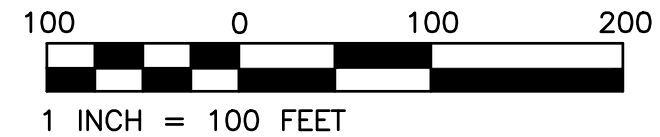
AC PAVEMENT REMOVAL AND REPLACEMENT



NOTES:

1. SEE AC PAVEMENT REPAIR DETAILS ON SHEET C5.
2. SHOWN AREAS ARE APPROXIMATE LOCATIONS.
3. CORNERS OF REPAIR AREAS WERE MARKED ON-SITE WITH WHITE PAINT.

PARKING, DRIVEWAY, AND DROP-OFF AREAS					
AREA NO.	DIMENSION	THICKNESS	UNIT	TOTAL AREA	UNIT
1	12' x 40'	4	IN	480	SF
2	16' x 23'	4	IN	368	SF
3	9' x 24'	4	IN	216	SF
4	30' X 36'	4	IN	1,080	SF
5	6' X 14'	4	IN	84	SF
6	20' X 25'	4	IN	500	SF



Know what's below.
Call before you dig.
 or (800) 227-2600

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

GRANITE OAKS MIDDLE SCHOOL
 2600 WYCKFORD BLVD,
 ROCKLIN, CA 95765
AC PAVEMENT REMOVAL AND REPLACEMENT PLAN

Sheet
C3
 5 of 9
 01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\C1-C7 GRANITE OAKS EXHIBIT.dwg Jan 15, 2019--01:52 pm



LEGEND

CRACK FILL, SEAL COAT, AND RE-STRIPE AS EXISTING



PARKING, DRIVEWAY, AND DROP-OFF AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	1/4"-1" Wide Rubberized Crack fill	LF	3,200
2	Seal Coat (Two Coats)	SF	93,700
3	Standard Parking Stalls	EA	80
4	ADA Symbol	EA	6
5	Accessible Unloading Area	EA	3
6	17' X 19' Unloading Area Crosshatch	EA	1
7	28' x 55' Crosswalk	EA	1
8	Curved Crosshatch	EA	2
9	White Crosswalk	EA	6
10	Yellow Crosswalk	EA	5
11	Arrow	EA	17
12	Red Curb Painting with "NPFL"	LF	1,500

NOTES:

1. SEE CRACK FILL DETAILS ON SHEET C5.
2. SEAL COAT WILL BE DONE IN TWO (2) COATS. SEE DETAIL ON SHEET C5.
3. ALL CURBS WILL BE REPAINTED TO MATCH EXISTING. SEE DETAIL ON SHEET C5.
4. ALL STRIPING AND PAVEMENT MARKINGS WILL BE DONE IN TWO (2) COATS AND WILL BE RE-STRIPE AND RE-PAINTED TO MATCH EXISTING.

DRIVEWAY AND PLAYCOURT AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
13	1/4"-1" Wide Rubberized Crack fill	LF	2,000
14	Seal Coat (Two Coats)	SF	80,200
15	Basketball Court	EA	6
16	42' x 74' Playcourt	EA	6
17	Multiple Number Stencils	LS	1
18	Four Squares	EA	4
19	Crossed White Line Striping	LF	60
20	28' x 40' Set of Number/ Letter Stencils	EA	3
21	Red Line Striping	LF	130



Know what's below.
Call before you dig.
or (800) 227-2600



1 INCH = 100 FEET

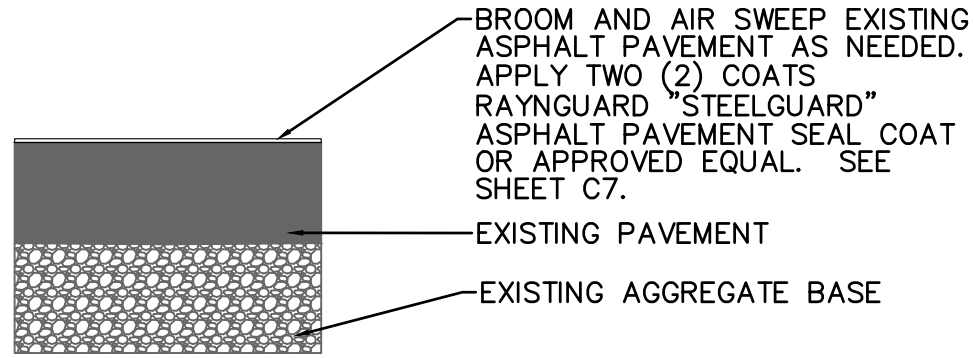
PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES			
					0	1/2	1	1 1/2
					QUANT.			
					DRAWN	PGC	RFE	
					DESIGN	PGC	RFE	
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK		

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

GRANITE OAKS MIDDLE SCHOOL
 2600 WYCKFORD BLVD,
 ROCKLIN, CA 95765
CRACK FILL, SEAL COAT, AND STRIPING PLAN

Sheet	C4
	6 of 9
	01/15/2019

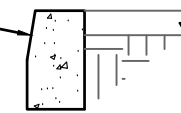


BROOM AND AIR SWEEP EXISTING ASPHALT PAVEMENT AS NEEDED. APPLY TWO (2) COATS RAYNGUARD "STEELGUARD" ASPHALT PAVEMENT SEAL COAT OR APPROVED EQUAL. SEE SHEET C7.

EXISTING PAVEMENT
EXISTING AGGREGATE BASE

POLYMER MODIFIED ASPHALT PAVEMENT SEAL COAT

SANDBLAST AND REMOVE ANY EXISTING LOOSE PAINT PRIOR TO NEW PAINT APPLICATION. PAINT COLOR TO MATCH EXISTING UNLESS OTHERWISE NOTED.



STANDARD CURB

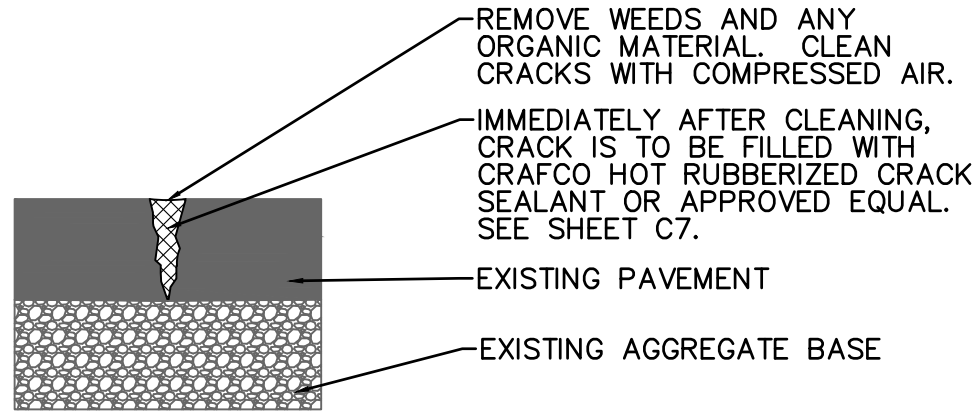


RAISED CURB REPAINTING

CURB MARKINGS AT FIRE LANES

NOTES:

- 1. REPAINT CURBS TO MATCH EXISTING COLOR AND MARKINGS.



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR. IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH CRAFCO HOT RUBBERIZED CRACK SEALANT OR APPROVED EQUAL. SEE SHEET C7.

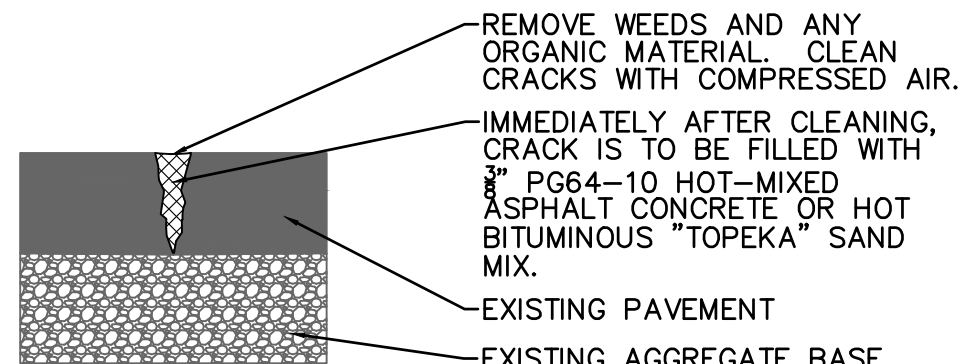
EXISTING PAVEMENT
EXISTING AGGREGATE BASE

CRACK WIDTHS 1/4"-1"

NOTES:

- 1. CRACK WIDTHS LESS THAN 1/4" SHALL NOT BE SEALED.

ASPHALT CRACK SEAL WITH HOT RUBBERIZED SEALANT

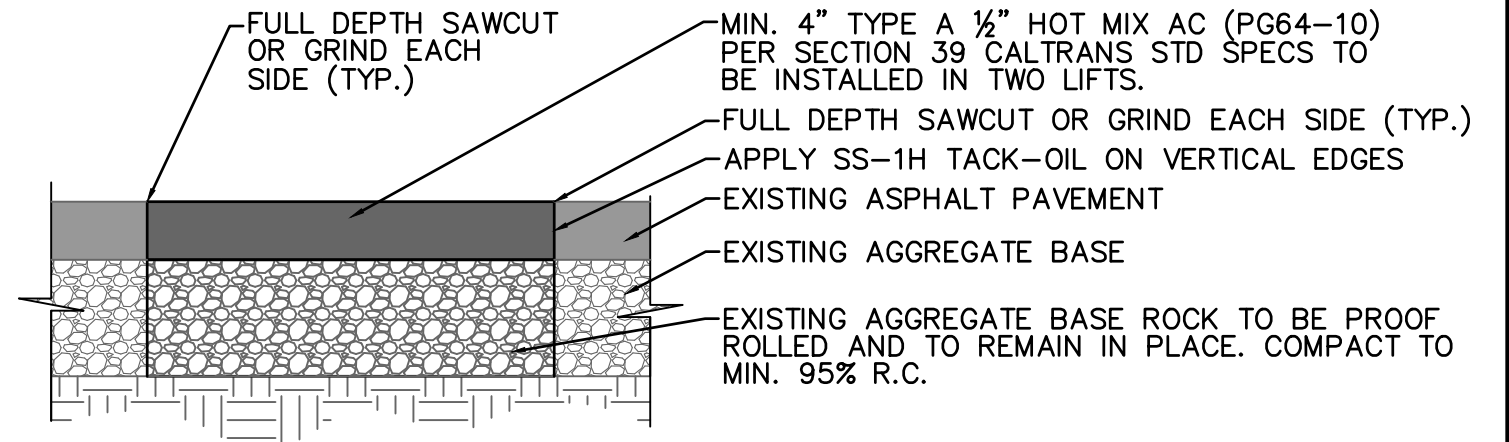


REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR. IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH 3/8" PG64-10 HOT-MIXED ASPHALT CONCRETE OR HOT BITUMINOUS "TOPEKA" SAND MIX.

EXISTING PAVEMENT
EXISTING AGGREGATE BASE

CRACK WIDTHS GREATER THAN 1"

ASPHALT CRACK REPAIR WITH HOT BITUMINOUS SAND MIX



PARKING AND DRIVEWAY AREAS

ASPHALT PAVEMENT REMOVAL AND REPLACEMENT ON (EXISTING) BASE

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

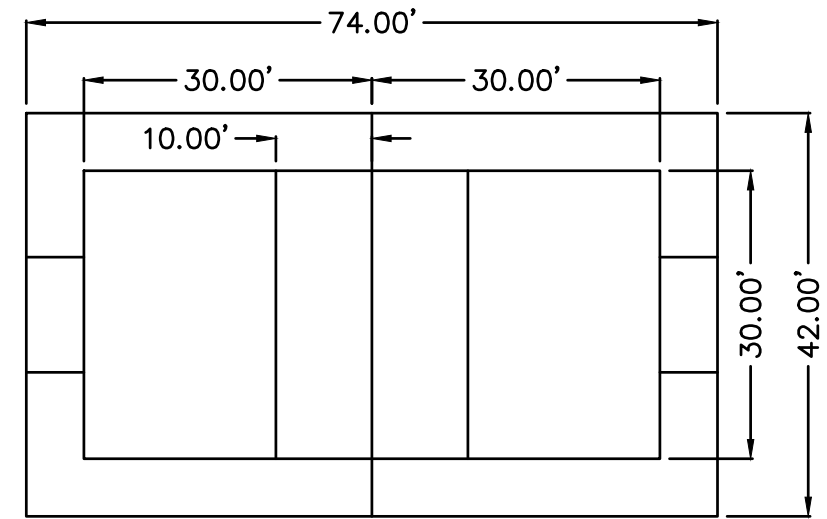
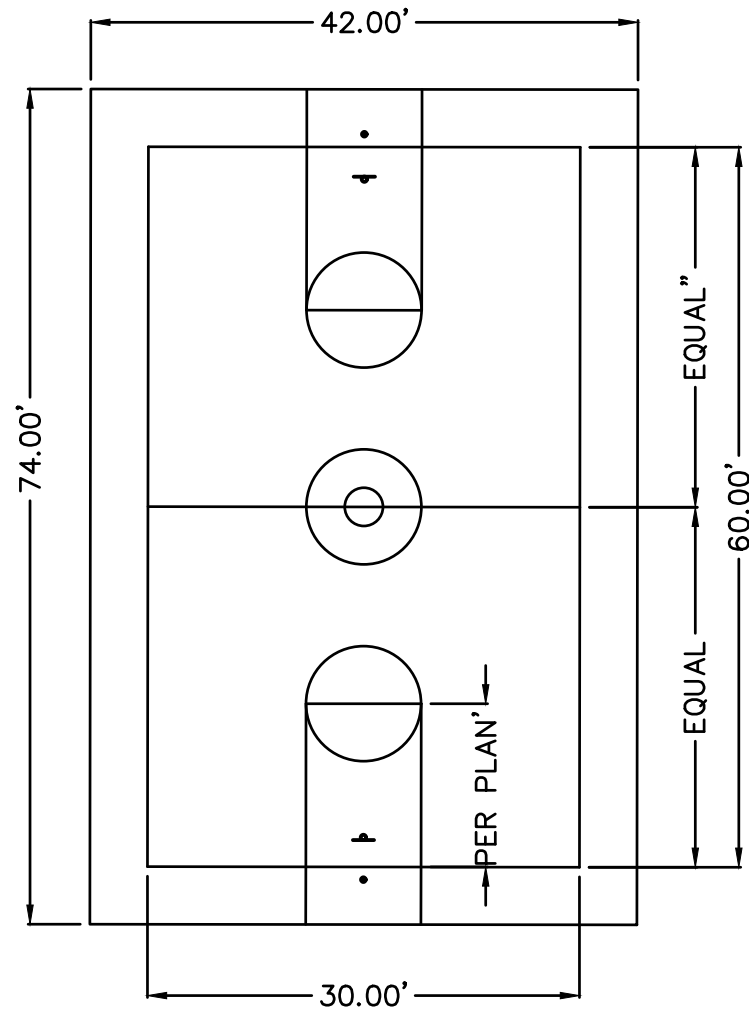
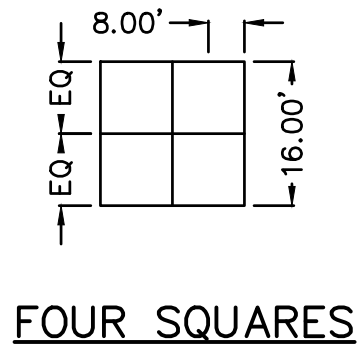
GRANITE OAKS MIDDLE SCHOOL
2600 WYCKFORD BLVD,
ROCKLIN, CA 95765
AC PAVEMENT REPAIR DETAILS

Sheet	C5
	7 of 9
	01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\C1-C7 GRANITE OAKS EXHIBIT.dwg Jan 15, 2019-01:52 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\C1-C7 GRANITE OAKS EXHIBIT.dwg Jan 15, 2019-01:52 pm



NOTES:

1. ALL PLAYCOURT STRIPING WILL BE RE-STRIPED AND RE-PAINTED AS EXISTING.
2. SHOWN DETAILS ARE FOR REFERENCE ONLY. VERIFY ACTUAL DIMENSIONS AND COLORED FINISH ON-SITE.
3. TYPICAL WHITE PAINT LINES ARE 3" WIDE.
4. ALL DIMENSIONS ARE TO INSIDE EDGE OF LINE.

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

GRANITE OAKS MIDDLE SCHOOL
2600 WYCKFORD BLVD,
ROCKLIN, CA 95765

PLAYCOURT STRIPING DETAILS

Sheet C6
8 of 9
01/15/2019



TECHNICAL DATA SHEET
STEELGUARD

A single package, water dispersed polymer modified, slate and mineral filled, black, asphalt coating. The product, following minimal dilution with potable water, may be easily applied by squeegee or spray applied with proper, heavy duty commercial equipment. It is designed to restore minor pavement surface profile loss; and to professionally seal all asphalt surfaces against accelerated deterioration from sun, wind, rain, tire abrasion and mild chemical attack.

Available in 5 and 55 gallon containers; and in bulk.

ADVANTAGES:

- May be applied above 50°F (10°C) and rising on most dry or slightly damp surfaces. (May be applied in cooler temperatures with the use of fast drying additives or under favorable conditions - See "Drying").
- SteelGuard provides excellent coverage with a higher film thickness per coat due to higher aggregate/binder content. Helps fill minor surface (non-working) cracks in the pavement to eliminate water penetration.
- SteelGuard provides excellent adhesion.
- Excellent curing properties under normal conditions. Assists in nighttime installations without direct sun loading. Quick-setting additives are available for more challenging installations.
- Will resist re-emulsification once fully cured. Traffic striping immediately after curing may be achieved without discoloration.
- Resistant to tire scuff and power steering abuse.
- Contains no bio-accumulative metals or chemicals. Non-hazardous in cured form; therefore, may be disposed as cured residue into any municipal land fill.

USES:

- Designed for application as a professional protective coating of asphalt pavements including driveways, playgrounds, parking lots, bike paths, surface streets, highways and airport taxiways and runways.
- Available in modified forms for various color applications, skid resistant requirements or for applications in demanding situations or on alternative surface materials.

APPLICATION:

Apply only onto clean, dry or damp surfaces from which all contaminants have been removed; i.e. built-up crankcase drippings, oil spots, loose traffic paint, etc. Areas upon which a high build-up of grease or loose paint exists shall be scraped, wire brushed and cleaned to eliminate oil residue from the underlying, sound asphaltic substrate. Prior to application it is recommended that these treated areas be further prepared by surface priming with an approved Oil Spot Treatment.

SteelGuard may be modified for special applications with a variety of polymers, adhesion packages, set control additives and select size aggregates for friction/skid promotion. Please contact your supplier for details.

SHIPPING INFORMATION:

CONTAINER SIZE	UNITS PER PALLET	CUBIC FT PER PALLET	WEIGHT PER PALLET	PALLETS PER 48' TRAILER
5 Gallon Pails	32	50	~ 1950	18
55 Gallon Drums	4	58	~ 2500	20

PHYSICAL PROPERTIES:

Water Absorption	< 1%	ASTM D-570
Weight per gallon	10.5 – 11.5 lbs/gallon	ASTM D-1475
Percent Solids	57 - 62	
Wet Track Abrasion	<35 grams / s.f.	ISSA A-105, T-100
VOC	< 10 grams / liter	BAAQMD Vol 3 Lab 22

SteelGuard contains 4.5 pounds of crushed aggregate, or more, per gallon and is supplied in a high viscosity, semi-paste consistency. The formula is balanced to provide suspension of the aggregate particles but stirring or mixing should be done prior to use to assure a balanced mix.

Immediately prior to application a pre-determined, small quantity of potable water shall be slowly mixed into the contents at an equivalent rate of one to five percent by volume (1 – 5% under normal conditions; up to as much as 10% under very hot conditions) of the **SteelGuard**.

Do not over dilute this product as this will terminate the anti-settling qualities of the **SteelGuard** and could possibly diminish the useful qualities of its cured physical properties.

DRYING: **SteelGuard** is one of the fastest curing pavement surfacing materials available. However, all waterborne curing rates are dependent upon evaporation of the water contained within the formula. The combined effects of surface temperature, air temperature, sun load, wind and humidity will determine the atmospheric water removal capabilities at any given moment. The professional installer will gain valuable experience in gauging time-to-cure by observing cure times against spread rates within the range of these five indicators.

Do not apply this product unless sufficient weather conditions exist to assure full cure prior to being subjected to rain, fog or other inclement weather or heavy traffic.

It is recommended that the inexperienced applicator use spread rates of 20 gallons per 1000 square foot, during daylight hours, at surface and air temperatures above 55° F (13°C) and rising with no rain, fog or other inclement weather in the forecast for at least 24 hours.

Immediately after application, clean implements, including hoses, with cool water after application. **SteelGuard** may crosslink & cure if left standing in sun exposed spray hoses.

TRANSPORTATION, STORAGE AND HANDLING:

- DOT: not regulated
- Keep/store out of direct sunlight.
- Do not allow to freeze prior to application.
- Do not mix with any other products.
- Keep containers tightly sealed when not in use.
- Avoid prolonged skin contact.
- Do not take internally. Do not induce vomiting if swallowed - call a physician immediately.
- Store, handle and dispose per MSDS requirements.



PRODUCT DATA SHEET
SUPERFLEX HT
PART NO. 34533

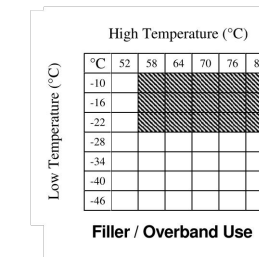
SEPTEMBER 2016

6165 W Detroit St. • Chandler AZ 85226
+1 (602) 276-0406 • +1 (800) 528-8242 • FAX +1 (480) 961-0513
www.crafco.com

READ BEFORE USING THIS PRODUCT

GENERAL Crafco Superflex HT sealant is a hot-applied asphalt based product used to fill cracks in asphalt concrete or Portland cement concrete pavements in moderate to very hot climates. Superflex HT is supplied in solid form which when melted and properly applied forms an adhesive and flexible compound that resists cracking in the winter and is highly resistant to tracking or pick-up by vehicle tires in hot climates. Superflex HT is used in highway, street, airfield and parking lot pavements and is applied to pavement cracks using either pressure feed melter applicators or pour pots. At application temperature, Superflex HT is a low viscosity, self-leveling product which easily penetrates narrow cracks. Superflex HT can be melted in jacketed double type melting units, or in small direct bottom fired types of melters. Both melter types must have sufficient agitation and temperature indicating devices to assure that the material is heated to and maintained within the specified application temperature range of 380° to 400°F (193 to 204°C). VOC = 0 g/l.

USAGE GUIDELINES Superflex HT is applicable for Filler/Overband Use in moderate to very hot climates with high and low pavement temperatures identified in the chart. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBIND V 3.1, and sealant or filler use is determined following Crafco Product Selection procedures.



SPECIFICATION CONFORMANCE

Crafco Superflex HT meets the following requirements when heated to the maximum heating temperature in accordance with ASTM D5167:

Tests

Softening Point (ASTM D36)
Flexibility, 1/8" (3.2 mm) specimen, 90° bend, 10 sec., 1" (25mm) mandrel (ASTM D3111 modified)
Cone Penetration (ASTM 5329)
Flow, 140°F (60°C), 5 hr. (ASTM D5329)
Elongation 77°F (25°C) (ASTM D412 die C)
Opening to Traffic Time
Maximum Heating Temperature
Application Temperature Range

Specification Limits

210°F (99°C) min.
Pass at 0°F (-18°C)
45 max.
0 mm.
1000% min.
30 minute max.
400°F (204°C)
380-400°F (193-204°C)

INSTALLATION

The unit weight of Crafco Superflex HT is 9.2 lbs./gal. (1.10 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Superflex Sealants to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of sealant.

PACKAGING

Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x 102 cm) 4-way pallets; can be stored outside, and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.
• **BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
• **PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

WARRANTY

CRAFCO, Inc. warrants that CRAFCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**

©2016, Crafco, Inc., #A1143

POLYMER MODIFIED SEAL COAT

HOT-APPLIED RUBBERIZED CRACK SEALANT

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\9 GRANITE OAKS\C1-C7 GRANITE OAKS EXHIBIT.dwg, Jan 15, 2019--01:52, pm

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEEngineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

GRANITE OAKS MIDDLE SCHOOL
2600 WYCKFORD BLVD,
ROCKLIN, CA 95765
MATERIAL SPECIFICATONS

Sheet	C7
9 of 9	01/15/2019

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT EVALUATION

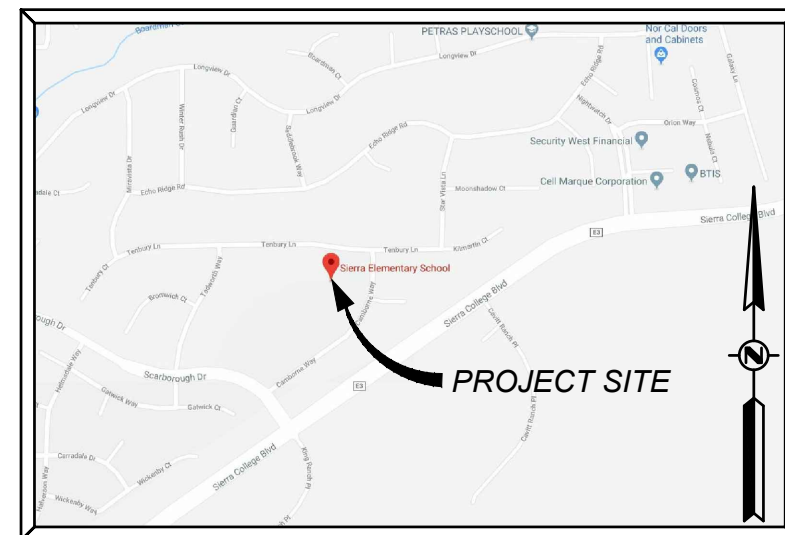
SIERRA ELEMENTARY SCHOOL PAVEMENT REHABILITATION PLANS

6811 CAMBORNE WAY,
ROCKLIN, CA 95677



LIMITS OF IMPROVEMENTS

SCALE: 1"=200'



VICINITY MAP

NOT TO SCALE

SHEET INDEX:

- C1 TITLE SHEET
- C2.1-C2.3 GENERAL NOTES
- C3 CRACK FILL, SEAL COAT AND STRIPING PLAN
- C4 AC PAVEMENT REPAIR DETAILS
- C5 PLAYCOURT STRIPING DETAILS
- C6 MATERIAL SPECIFICATIONS

OWNER:

CRAIG ROUSE
ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DRIVE,
ROCKLIN, CA 95677
PH: (916) 630-2246



Know what's below.

Call before you dig.
or (800) 227-2600

NOTICE TO CONTRACTOR :

THIS SET IS BASED ON AERIAL PHOTOGRAPHY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING INFORMATION SHOWN ON THESE PLANS IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING SITE CONDITIONS. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR MUST ALSO CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.

200 0 200 400



1 INCH = 200 FEET

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
BY	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

**ROCKLIN UNIFIED
SCHOOL DISTRICT**

2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

SIERRA ELEMENTARY SCHOOL
6811 CAMBORNE WAY,
ROCKLIN, CA 95677

TITLE SHEET

Sheet

C1

1 of 8

01/15/2019

TECHNICAL SPECIFICATIONS:

TS-1 THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER.

TS-2 NOTIFICATIONS
IN ORDER TO ALLOW THE OWNER SUFFICIENT TIME TO NOTIFY THE VARIOUS OCCUPANTS OF UPCOMING WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AT LEAST TEN (10) WORKING DAYS BEFORE COMMENCING WORK ON ANY PORTION OF THE WORK.

TS-3 PROTECTION OF EXISTING INSTALLATIONS
THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING INSTALLATIONS FROM DAMAGE RESULTING FROM THE OPERATION OF EQUIPMENT OR PLACEMENT OF MATERIAL. SUITABLE PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXPOSED SURFACES FROM DISCOLORATION RESULTING FROM THE APPLICATION OF ASPHALTIC MATERIALS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, AT NO EXTRA COST TO THE OWNER, TO PROVIDE SUITABLE MEANS OF DUST CONTROL RESULTING FROM HIS PERFORMANCE OF THE WORK. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

TS-4 CONTROL OF MATERIALS
ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED IN A WORKMANLIKE MANNER. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE AREAS OF WORK SHOWN ON THE PLANS.
THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO VERIFY WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER.
INITIAL TESTING DONE TO DETERMINE SPECIFICATION COMPLIANCE WILL BE PERFORMED AND PAID FOR BY THE OWNER. IF ANY PARTICULAR PORTION OF THE WORK DOES NOT PASS THIS TESTING, IT SHALL BE SUBJECT TO A RETEST AFTER THE CONTRACTOR FEELS HE HAS REMEDIED THE DEFICIENCY. ALL RETESTING WILL BE PAID FOR BY THE CONTRACTOR.
IN THE EVENT THAT THE OWNER DOES NOT PROVIDE ON-SITE INSPECTION DURING CONSTRUCTION, THE CONTRACTOR IS HEREBY NOTIFIED THAT TWO OR MORE CORE TESTS WILL BE TAKEN TO CHECK FOR COMPLIANCE TO THESE SPECIFICATIONS. IF DEFICIENCIES IN MATERIAL QUALITY, THICKNESS, OR DENSITIES ARE DETERMINED, THE ENTIRE AREA REPRESENTED BY THAT TEST SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. IN ADDITION, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ADDITIONAL TESTING TO DETERMINE COMPLIANCE OF ALL OTHER AREAS TESTED. ALL NON-COMPLYING AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

TS-5 WORK SCHEDULE AND PUBLIC SAFETY
FIVE (5) DAYS PRIOR TO INITIATING THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE OF WORK TO THE ENGINEER FOR HIS REVIEW. THE PLAN SHALL CLEARLY INDICATE HOW THE WORK IS TO BE LAID OUT AND THE ORDER IN WHICH INDIVIDUAL AREAS WILL BE COMPLETED. THE GOAL OF THIS REQUIREMENT IS TO ENSURE THAT PUBLIC TRAFFIC IS SAFELY MAINTAINED AND THAT THERE IS ADEQUATE PUBLIC ACCESS TO THE SITE.
CONTRACTOR IS RESPONSIBLE FOR BARRICADING OR TAPING OFF THE WORK TO BE COMPLETED EARLY ENOUGH IN ADVANCE TO ASSURE NO VEHICLES OR OTHER OBSTACLES ARE LEFT IN THE WAY OF CONSTRUCTION.

TS-6 TRAFFIC CONTROL
CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL NECESSARY TO MAINTAIN PUBLIC SAFETY AND ACCESS TO THE PROJECT SITE. PREAPPROVAL BY THE ENGINEER IS REQUIRED BEFORE IMPOSING ANY TRAFFIC CLOSURES. TRAFFIC CONTROL MAY INVOLVE FLAGMEN, GUARDS, BARRICADES, SIGNS, LIGHTS, FLARES, RADIOS, AND OTHER FACILITIES.
THE CONTRACTOR SHALL INCLUDE TRAFFIC CLOSURES IN THE PROPOSED WORK SCHEDULE SUBMITTAL AS DESCRIBED IN SECTION TS-5, "WORK SCHEDULE, AND PUBLIC SAFETY."

TS-7 DUST CONTROL
THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.

TS-8 BEFORE EXECUTION OF ANY WORK, THE CONTRACTOR SHALL EXAMINE ACTUAL JOB CONDITIONS AND REPORT TO RFE ENGINEERING, INC. ANY ERROR, OMISSION, OR DISCREPANCY AFFECTING WORK. UPON COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO RFE ENGINEERING, INC. IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER OR CITY ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. ANY COST INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TS-9 THE CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK THAT IS CONSTRUCTED.

TS-10 THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER "AS BUILT" DRAWINGS AT PROJECT COMPLETION. THE CONTRACTOR SHALL PROVIDE ONE COMPLETE ACCURATE SET OF RECORD CHANGES. THE CHANGES SHALL BE PLACED ON A CLEAN SET OF PROJECT DRAWINGS IN RED, AND GIVEN TO THE ENGINEER AT JOB COMPLETION.

TS-11 THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE QUANTITIES FOR BID AND FIELD INSTALLATION.

TS-12 THESE DRAWINGS ARE FOR THIS SPECIFIC PROJECT AND NO OTHER USE IS AUTHORIZED. RFE ENGINEERING, INC. DISCLAIMS ALL RESPONSIBILITY FOR CONSTRUCTION BEYOND WHAT IS SPECIFICALLY DESIGNED OR DETAILED HEREIN.

TS-13 EROSION CONTROL NOTES
EROSION AND SEDIMENTATION CONTROL PROGRAM: THE LOCATION OF EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THESE PLANS MAY VARY ACCORDING TO THE SEASON AND PHASE OF CONSTRUCTION. THE OBJECTIVE OF THESE MEASURES IS TO MITIGATE THE EROSION AND SEDIMENTATION IMPACTS.

MAINTENANCE PROGRAM: THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE EROSION AND SEDIMENTATION MITIGATION MEASURES ON ALL DISTURBED AREAS BEFORE, DURING, AND AFTER STORMS. THE CONTRACTOR SHALL ENSURE THAT THE EROSION AND SEDIMENTATION MEASURES ARE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS.

INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. WINTERIZATION AND EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

TS-14 DEMOLITION PLAN NOTES
SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION. ENGINEER SHALL VERIFY LIMITS OF DEMOLITION. PROTECT EXISTING PAVEMENT THAT WILL REMAIN.

THE DISPOSAL OF ALL DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS. ANY PERMITS REQUIRED FOR SUCH DISPOSAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.

EXISTING MATERIALS (I.E. IRRIGATION, ELECTRICAL) TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

TS-15 FULL-DEPTH AC PAVEMENT REPAIR OR RECONSTRUCTION

GENERAL
AREAS DESIGNATED BY THE ENGINEER SHALL BE DUG OUT TO A DEPTH AS SHOWN ON THE PLANS, REMOVED AND REPLACED WITH THE SAME THICKNESS OF AC, UNLESS OTHERWISE DIRECTED ON THE CONTRACT PLANS. THE AC SHALL BE PLACED IN TWO (2) EQUAL LIFTS. THE FINAL LIFT MUST BE 1.5 INCHES THICK OR GREATER. **THE COMMON PRACTICE OF CAPPING DIGOUTS WITH A THIN LIFT OF ASPHALT IS NOT ACCEPTABLE.**

MATERIALS
THE ASPHALT CONCRETE USED FOR THIS WORK SHALL CONFORM TO ALL REQUIREMENTS OF **SECTION TS-17**, "ASPHALT CONCRETE," OF THESE TECHNICAL SPECIFICATIONS.
TACK COAT EMULSION SHALL BE SS-1H.

CONSTRUCTION
THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR DISPOSAL OF EXCAVATED MATERIALS.
ALL EDGES SHALL BE SAW-CUT OR MILLED. IF A MILLING MACHINE IS USED, ALL SLOPING EDGES SHALL BE CHIPPED TO A VERTICAL FACE. EXPOSED EDGES SHALL BE PROTECTED AGAINST BREAKAGE WITH TIMBERS OR AC MIX WHENEVER A ROLLER ENTERS OR LEAVES THE REPAIR SPOT.

THE UNDERLYING MATERIAL TO REMAIN IN PLACE SHALL BE RECOMPACTED TO 95 PERCENT MINIMUM RELATIVE COMPACTION AS DETERMINED BY AASHTO TESTS T180 AND T238 TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE REPAIR. AFTER COMPACTION AND PRIOR TO THE PLACING OF ASPHALT CONCRETE, THE VERTICAL EDGES OF THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT.
WHENEVER THE SURFACE COURSE OF AC IS PLACED MORE THAN FOUR HOURS AFTER THE BASE COURSE OR, IN THE OPINION OF THE ENGINEER, CONTAMINATION BY DIRT OR DUST HAS CAUSED THE BASE COURSE TO LOSE ITS TACKINESS, A TACK COAT SHALL BE APPLIED TO THE ENTIRE AREA OF THE REPAIR BEFORE PLACING THE SURFACE COURSE. TACK COAT SHALL BE APPLIED AT A RATE EQUIVALENT TO 0.05 TO 0.15 GALLONS PER SQUARE YARD.
THE FINISHED REPAIR SHALL CONFORM TO THE SURROUNDING GRADE AND CONTOUR AND SHALL NOT TRAP WATER OR PRESENT A VISIBLE HUMP.

ASPHALT CONCRETE SHALL BE COMPACTED TO A MINIMUM 93 PERCENT OF MAXIMUM THEORETICAL DENSITY (DENSITY WITH ZERO AIR VOIDS) AS DETERMINED BY AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) D-2041.

UNSUITABLE MATERIAL
IN THE EVENT THAT THE UNDERLYING MATERIAL IS UNSUITABLE, IT SHALL BE EXCAVATED BELOW THE DEPTH REQUIRED ABOVE AND DISPOSED OF IN ACCORDANCE WITH THESE SPECIAL PROVISIONS. THE LIMITS OF REMOVAL SHALL BE DESIGNATED BY THE ENGINEER. THE RESULTING SPACE SHALL BE FILLED WITH A SINGLE LIFT OF ASPHALT CONCRETE.

UNSUITABLE MATERIAL IS DEFINED AS MATERIAL THE ENGINEER DETERMINES TO BE:

- a. OF SUCH UNSTABLE NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS AT OPTIMUM MOISTURE CONTENT; OR
- b. TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE IN-PLACE DRYING PRIOR TO INCORPORATION INTO THE WORK; OR
- c. OTHERWISE UNSUITABLE FOR THE PLANNED USE.

TS-16 TACK COAT
AN ASPHALT EMULSION TACK COAT SHALL BE APPLIED TO ALL VERTICAL SURFACES OF EXISTING PAVEMENT, CURBS, GUTTERS, AND CONSTRUCTION JOINTS, AGAINST WHICH ADDITIONAL MATERIAL IS TO BE PLACED.
ADDITIONALLY, WHEN PLACING AN OVERLAY WITHOUT FABRIC, THE TOP LIFT OF A FULL-DEPTH AC REPAIR, OR AC LEVELING, PAVING SHALL BE PRECEDED BY A TACK COAT OVER THE ENTIRE SURFACE UNLESS THE EXISTING SURFACE HAS BEEN PLACED WITHIN THE LAST FOUR HOURS AND, IN THE OPINION OF THE ENGINEER, IS CLEAN ENOUGH TO BOND WITHOUT THE NEED FOR A TACK COAT.
THE TACK COAT SHALL BE SS-1H, MEETING THE REQUIREMENTS OF SECTION 94 OF THE STATE STANDARD SPECIFICATIONS. FULL COMPENSATION FOR FURNISHING AND APPLYING ASPHALT EMULSION TACK COAT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEMS INVOLVING ASPHALT CONCRETE.

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2



ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

SIERRA ELEMENTARY SCHOOL
6811 CAMBORNE WAY,
ROCKLIN, CA 95677
GENERAL NOTES

Sheet
C2.1
2 of 8
01/15/2019

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

QUANT.			
DRAWN	PGC	RFE	
DESIGN	PGC	RFE	
	BY	CHECK	

Z:\2018 Projects\18113_Rocklin_Schools_Pavement_Evaluation\WORKING\CAD\14_SIERRA_ELEMENTARY_SCHOOL\C1-C8_SIERRA_ELEM_SCHOOL_EXHIBIT.dwg, Jan 18, 2019 - 09:57 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

TS-17 ASPHALT CONCRETE

GENERAL

THE FOLLOWING PROVISIONS FOR ASPHALT CONCRETE MATERIAL SHALL APPLY TO WORK COMPLETED WITHIN THESE SPECIFICATIONS.

MATERIALS

ASPHALT CONCRETE SHALL COMPLY WITH THE PROVISIONS OF SECTION 39 OF THE CALIFORNIA STATE STANDARD SPECIFICATIONS AND AS MODIFIED HEREWITH. THE REQUIREMENTS PROVIDED WITHIN THESE SPECIAL PROVISIONS SHALL SUPERSEDE STATE SPECIFICATIONS WHERE CONFLICTS OR OTHER DISPARITIES EXIST. THE USE OF AGGREGATE SOURCE STEMMING FROM BEAR RIVER OR ANY SIMILAR SOURCE OF AGGREGATE THAT IS KNOWN TO CONTAIN A SIGNIFICANT AMOUNT OF QUARTZITE MATERIAL IS NOT TO BE USED IN PRODUCTION OF ASPHALT CONCRETE MATERIALS FOR THIS PROJECT.

ASPHALT CONCRETE SHALL BE HOT PLANT MIXED AND SHALL BE FURNISHED FROM THE PLANT AT A TEMPERATURE NOT TO EXCEED 325 DEGREES F.

ASPHALT CONCRETE FOR PAVING WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED, STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

ASPHALT CONCRETE FOR PAVEMENT REPAIR WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A **PG 64-10 VISCOSITY GRADED; STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.**

THE ACTUAL ASPHALT CEMENT CONTENT MAY VARY UP TO 0.3% PLUS/MINUS FROM THE TARGET OPTIMUM BITUMEN CONTENT (OBC) UNLESS THE JOB-MIX-DESIGN AND FINAL PRODUCT INDICATE THE REQUIRED PROVISIONS ARE NOT MET.

NOTE: AT THE OBC, THE COMPACTED MIXTURE SHALL HAVE THE FOLLOWING PROPERTIES:

HVEEM STABILITY 35 MIN. TYPE B
37 MIN. TYPE A

THE SUGGESTED JOB-MIX-DESIGN AIR VOIDS BELOW ARE PROVIDED TO HELP OBTAIN COMPACTION REQUIREMENTS IN THE FIELD AND ARE NOT A SPECIFICATION REQUIREMENT.

AIR VOIDS 3% TO 5%

ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED TO INDUSTRY STANDARDS.

SUBMITTALS

THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER FOR REVIEW AND APPROVAL, AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, A LIST OF HIS SOURCES OF MATERIALS TOGETHER WITH A CERTIFICATE OF COMPLIANCE, INDICATING THAT MATERIALS TO BE INCORPORATED IN THE WORK FULFILL THE REQUIREMENTS OF THESE SPECIFICATIONS AND THE JOB-MIX-DESIGN FOR THE ASPHALT CONCRETE. THE CERTIFICATE OF COMPLIANCE SHALL BE SIGNED BY THE MATERIAL SUPPLIER OR HIS REPRESENTATIVE. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE PAVED AREAS SHOWN ON THE PLANS.

AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, THE CONTRACTOR SHALL ALSO FURNISH A **JOB-MIX-DESIGN** FOR THE ASPHALT CONCRETE. THE JOB-MIX-DESIGN SHALL INDICATE ALL OF THE FOLLOWING:

1. PERCENTAGE PASSING EACH SIEVE SIZE
2. PERCENT ASPHALT RECOMMENDED
3. PERCENT VOIDS*
4. STABILITY*
5. MAXIMUM THEORETICAL UNIT WEIGHT*

THE * ITEMS SHALL BE PROVIDED AT EACH ASPHALT CONTENT USED TO ARRIVE AT THE RECOMMENDED OPTIMUM BITUMEN CONTENT.

THE JOB-MIX-DESIGN SHALL BE IN EFFECT UNTIL A CHANGE IS APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

TS-18 ADJUST UTILITY COVERS

STORM DRAIN AND SEWER MANHOLE COVERS, CLEANOUTS, WATER VALVE COVERS, UTILITY VAULT AND OTHER SUCH UTILITY ACCESS COVERS, WITHIN AREAS TO BE PAVED WITH ASPHALT CONCRETE SHALL BE ADJUSTED BY THE CONTRACTOR TO THE NEW FINISHED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE NUMBER OF UTILITY COVERS TO BE ADJUSTED, ACCURATELY REFERENCING ALL COVERS PRIOR TO PAVING AND ADJUSTING THE COVERS AFTER PAVING HAS BEEN COMPLETED.

CUTTING OF THE NEW PAVEMENTS TO MAKE UTILITY COVER ADJUSTMENTS SHALL BE ACCOMPLISHED WITHOUT DISTURBING OR DEFORMING ASPHALT CONCRETE THAT IS TO REMAIN. DEFORMED ASPHALT CONCRETE SHALL BE REMOVED AND REPAIRED AS DIRECTED BY THE ENGINEER.

UNLESS OTHERWISE SPECIFIED BY THE UTILITY OWNER, COVER FRAMES ARE TO BE SET TO GRADE AND BACKFILLED TO WITHIN 1 1/2 INCHES OF THE FINISHED SURFACE WITH PORTLAND CEMENT CONCRETE. ASPHALT CONCRETE CONFORMING TO THE PROVISIONS IN SECTION TS-11 OF THESE TECHNICAL SPECIFICATIONS SHALL BE USED TO COMPLETE THE RESTORATION TO THE NEW FINISHED SURFACE. SURFACE TOLERANCES AS SPECIFIED FOR ASPHALT CONCRETE OVERLAY SHALL APPLY TO THE RESTORATION OF PAVING SURFACES, INCLUDING THE POSITIONING OF UTILITY COVERS AND FRAMES.

TS-19 SURFACE SEAL COAT (TWO COATS)

GENERAL

THIS WORK SHALL CONSIST OF PREPARING THE SURFACE OF EXISTING ASPHALT CONCRETE PAVEMENT AND APPLYING A SEAL COAT COMPOSED OF A PETROLEUM ASPHALT EMULSION, LATEX POLYMER, AND MINERAL AGGREGATE. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS FOR DOING ALL OF THE WORK NECESSARY TO SEAL COAT THE AREAS DESIGNATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED MUST BE ERADICATED PRIOR TO THE SEAL COAT APPLICATION.

MATERIALS

THE ASPHALT EMULSION SEAL COAT MATERIAL TO BE FURNISHED AND APPLIED BY THE CONTRACTOR SHALL BE **RAYNGUARD "STEELGUARD" PAVEMENT SEALER**, OR APPROVED EQUAL. **NOTE: COAL TAR EMULSION AND GILSONITE PRODUCTS ARE NOT ACCEPTABLE.**

SEAL COAT MATERIAL DELIVERED FOR USE ON THE WORK SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

1. RESIDUE AT 300 - 400 DEGREES F., % 60 - 70
2. DEHYDRATION, 96 HOURS AT 100 DEGREES F. 0.6 MIN
3. SOLUBILITY OF RESIDUE IN C2HCL 15 - 20
4. LOSS ON IGNITION OF INSOLUBLE RESIDUE % 16 MAX
5. CONE PENETRATION AT 77 DEGREES F., DMM 400 - 700

MIX DESIGN COMPOSITION:

FIRST APPLICATION

100 GALLONS SEAL COAT MATERIAL
300 POUNDS SILICA SAND (30 MESH) (IF NOT INCLUDED IN SEAL MATERIAL)
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF PORTABLE WATER FOR DILUTION

SECOND APPLICATION

100 GALLONS SEAL COAT MATERIAL
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF POTABLE WATER FOR DILUTION

DILUTION OF SEAL MATERIAL WITH WATER FOR EASE OF APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ANY WATER ADDITION SHALL BE CAREFULLY MEASURED INTO A KNOWN VOLUME OF SEAL MATERIAL. AGGREGATE SHALL BE EITHER NATURAL OR MANUFACTURED PRODUCT COMPOSED OF CLEAN, HARD, DURABLE PARTICLES FREE FROM DIRT, ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A CERTIFICATE FROM THE SUPPLIER OF THE SEAL COAT MATERIAL GIVING THE TRADE NAME OF THE SEALER AND VERIFICATION THAT THE SEALER CONFORMS TO THESE SPECIFICATIONS.

APPLICATION

THE SURFACE TO BE SEALED SHALL BE CLEANED TO REMOVE ALL ORGANIC MATERIALS, SAND, DUST, AND CLAY. PRIOR TO PLACING THE SEAL, CRACKS SHALL BE FILLED, AND ALL AREAS CAPABLE OF PONDING WATER GREATER THAN 3/8 INCH IN DEPTH SHALL BE PRE-LEVELLED AS NECESSARY TO ELIMINATE THE POSSIBILITY OF STANDING WATER.

BEFORE PLACING THE SEAL, ALL AREAS OF WATER DAMAGED (RAVELED) PAVEMENT IN EXCESS OF 1/8 INCH REMOVED ASPHALT CONCRETE SHALL RECEIVE ONE PRECOAT OF UNDILUTED EMULSIFIED ASPHALT SEAL MATERIAL WITH 5 POUNDS OF SAND PER GALLON OF SEAL. THE PRECOAT SHALL FILL THE RAVELED PAVEMENT AND PROVIDE A SMOOTH, NEAT SURFACE PRIOR TO PLACEMENT OF THE TWO COATS OF DILUTED SEAL MATERIAL.

ACCUMULATIONS OF OIL AND GREASE THAT MAY ADVERSELY AFFECT SEAL COAT BONDING SHALL BE REMOVED BY GRINDING, SCRAPING, OR SCRUBBING WITH TRISODIUM PHOSPHATE OR AN EQUALLY EFFECTIVE INDUSTRIAL DETERGENT. PAVEMENT AREAS REDUCED BY GRINDING SHALL RECEIVE A TACK COAT AND SKIN PATCH OF 1/4 INCH AC MIX. PAVEMENT AREAS CLEANED WITH DETERGENT SHALL BE THOROUGHLY RINSED WITH WATER AND ALLOWED TO DRY. PRIOR TO SEAL COATING, THE CLEANED AREAS SHALL BE TREATED WITH A PROPRIETARY OIL STAIN PRE-TREATMENT OR A 1:1 SOLUTION OF ISOPROPYL ALCOHOL AND SHELLAC.

SEAL SHALL NOT BE APPLIED TO A WET SURFACE NOR WHEN RAIN OR FREEZING WEATHER IS EXPECTED WITHIN 24 HOURS. AIR AND PAVEMENT TEMPERATURE AT TIME OF APPLICATION SHALL BE BETWEEN 60 AND 95 DEGREES F. AND NO SEAL COAT SHALL BE APPLIED WHEN THE AIR TEMPERATURE IS 60 DEGREES F OR LESS. ALSO, OTHER CONDITIONS ARE AS FOLLOWS:

MINIMUM FOUR (4) HOURS OF SUNSHINE EXPECTED IN NEXT TEN (10) HOURS, RELATIVE HUMIDITY BELOW 50% AND WIND SPEED MINIMUM OF FIVE (5) MILES PER HOUR.

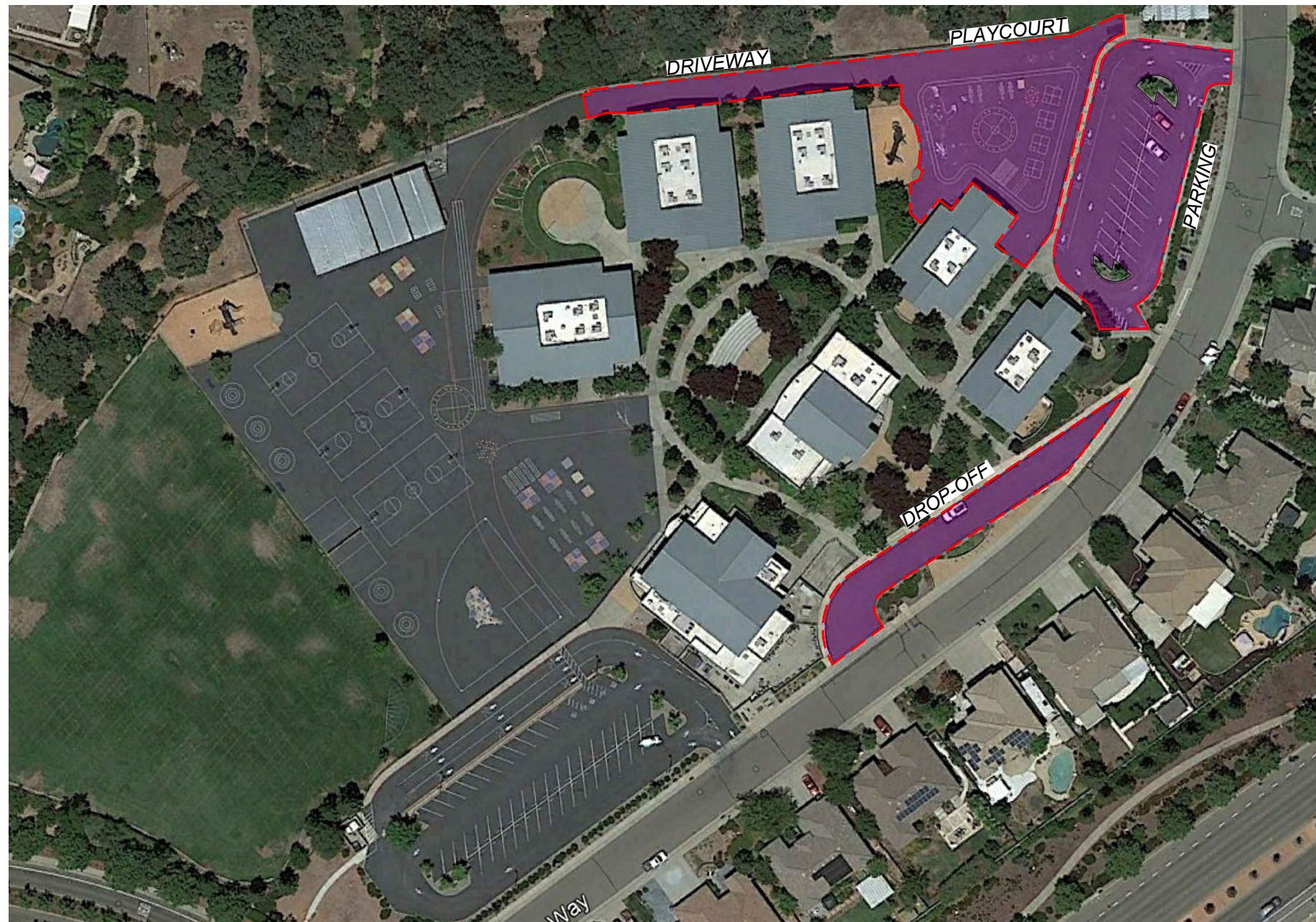
THE CONTRACTOR MAY, BASED ON HIS OWN EXPERIENCE, APPLY SEAL COAT DURING FAVORABLE DRYING CONDITIONS WHEN ONE MAJOR POSITIVE FACTOR IN DRYING SUCH AS SUNSHINE, SURFACE TEMPERATURE, HIGH AIR TEMPERATURE, OR LOW HUMIDITY COMPENSATE FOR OTHER NEGATIVE FACTORS. PRIOR TO PLACING THE FIRST COAT OF SEAL COAT IN EXCEPTIONALLY HOT WEATHER, THE SURFACE SHALL BE DAMPENED WITH WATER. ALL EXCESS WATER SHALL BE REMOVED TO LEAVE THE SURFACE ONLY SLIGHTLY DAMP.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\14 SIERRA ELEMENTARY SCHOOL\C1-C8 SIERRA ELEM SCHOOL EXHIBIT.dwg, Jan 18, 2019 - 09:07 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>SIERRA ELEMENTARY SCHOOL 6811 CAMBORNE WAY, ROCKLIN, CA 95677</p> <p>GENERAL NOTES</p>	<p>Sheet C2.2 3 of 8 01/15/2019</p>				
NO.	REVISION	DATE	BY	APPRV'D	QUANT.		DRAWN	PGC	RFE	DESIGN	PGC	RFE	BY

Z:\2018 Projects\18113 - Rocklin Schools - Pavement Evaluation\WORKING CAD\14 - SIERRA ELEMENTARY SCHOOL\CI-C6 SIERRA ELEM SCHOOL EXHIBIT.dwg, Jan 15, 2019 - 03:04 pm



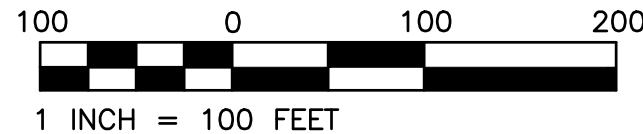
LEGEND

CRACK FILL, SEAL COAT, AND RE-STRIPE AS EXISTING



NOTES:

1. SEE CRACK FILL DETAILS ON SHEET C4.
2. SEAL COAT WILL BE DONE IN TWO (2) COATS. SEE DETAIL ON SHEET C4.
3. ALL CURBS WILL BE REPAINTED TO MATCH EXISTING. SEE DETAIL ON SHEET C4.
4. ALL STRIPING AND PAVEMENT MARKINGS WILL BE DONE IN TWO (2) COATS AND WILL BE RE-STRIPED AND RE-PAINTED TO MATCH EXISTING.



PARKING AND DROP-OFF AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	1/4"-1" Wide Rubberized Crack fill	LF	350
2	Seal Coat (Two Coats)	SF	22,000
3	Parking Stalls	EA	24
4	ADA Symbol	EA	2
5	Accessible Unloading Area	EA	1
6	Curbed Crosshatch	EA	1
7	Crosswalk Striping	EA	3
8	White Striping Line	LF	150
9	Irregular Crosshatches	EA	2
10	"Principal" Stencil	EA	1
11	"Secretary" Stencil	EA	1
12	"Staff" Stencil	EA	1
13	"Drop Off Only No Parking" Stencil	EA	2
14	Arrow	EA	13
15	Double Arrows	EA	1
16	Red Curb Painting with "NPFL"	LF	900
17	White Curb Painting	LF	30
DRIVEWAY AND KINDERGARTEN PLAYCOURT AREA			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
18	1/4"-1" Wide Rubberized Crack fill	LF	350
19	Seal Coat (Two Coats)	SF	20,400
20	Hopscotch	EA	4
21	Multiple Number Stencils	LS	1
22	Four Squares	EA	11
23	Miscellaneous Colored Custom Markings	LS	1
24	32' Ø Circle with Letters/Numbers	EA	1
25	Running Track at Kindergarten Area	EA	1
26	Miscellaneous Lines at Kindergaren	LS	1



Know what's below.
Call before you dig.
 or (800) 227-2600

PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION				ORIGINAL SCALE IS IN INCHES					
QUANT.		PGC		RFE					
DRAWN		PGC		RFE					
DESIGN		PGC		RFE					
NO.		REVISION		DATE		BY		APPRV'D	
		BY		CHECK					

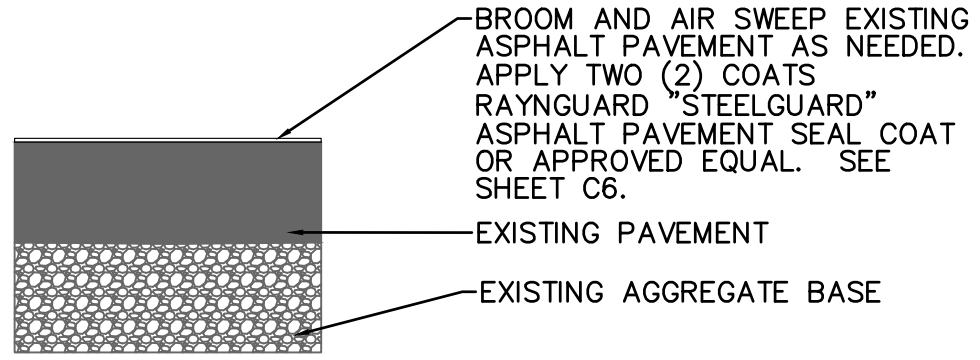
RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEEngineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

SIERRA ELEMENTARY SCHOOL
 6811 CAMBORNE WAY,
 ROCKLIN, CA 95677
CRACK FILL, SEAL COAT, AND STRIPING PLAN

Sheet	C3
	5 of 8
	01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\14-SIERRA ELEMENTARY SCHOOL\C1-C6 SIERRA ELEM SCHOOL EXHIBIT.dwg, Jan 15, 2019-03:04 pm



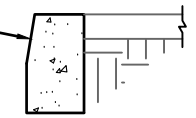
BROOM AND AIR SWEEP EXISTING ASPHALT PAVEMENT AS NEEDED. APPLY TWO (2) COATS RAYNGUARD "STEELGUARD" ASPHALT PAVEMENT SEAL COAT OR APPROVED EQUAL. SEE SHEET C6.

EXISTING PAVEMENT

EXISTING AGGREGATE BASE

POLYMER MODIFIED ASPHALT PAVEMENT SEAL COAT

SANDBLAST AND REMOVE ANY EXISTING LOOSE PAINT PRIOR TO NEW PAINT APPLICATION. PAINT COLOR TO MATCH EXISTING UNLESS OTHERWISE NOTED.



STANDARD CURB

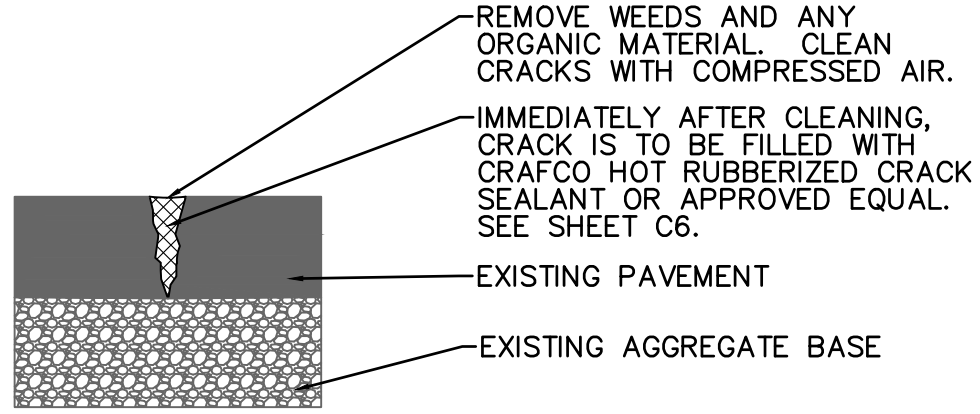


RAISED CURB REPAINTING

CURB MARKINGS AT FIRE LANES

NOTES:

- 1. REPAINT CURBS TO MATCH EXISTING COLOR AND MARKINGS.



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR.

IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH CRAFCO HOT RUBBERIZED CRACK SEALANT OR APPROVED EQUAL. SEE SHEET C6.

EXISTING PAVEMENT

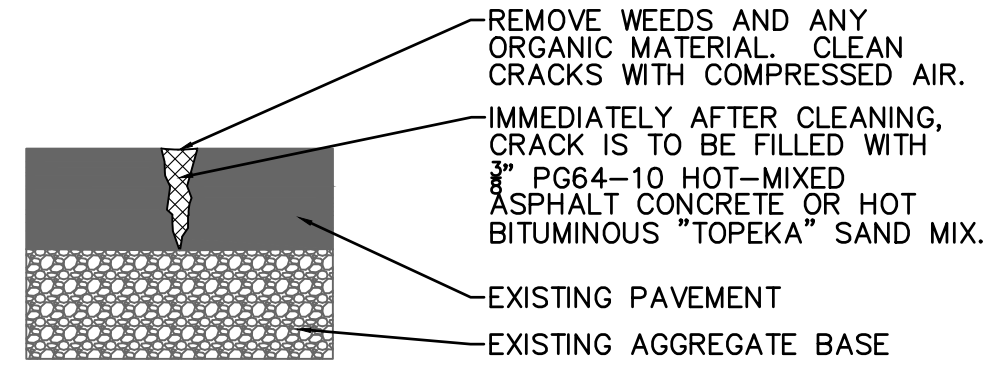
EXISTING AGGREGATE BASE

CRACK WIDTHS 1/4"-1"

NOTES:

- 1. CRACK WIDTHS LESS THAN 1/4" SHALL NOT BE SEALED.

ASPHALT CRACK SEAL WITH HOT RUBBERIZED SEALANT



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR.

IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH 3/8" PG64-10 HOT-MIXED ASPHALT CONCRETE OR HOT BITUMINOUS "TOPEKA" SAND MIX.

EXISTING PAVEMENT

EXISTING AGGREGATE BASE

CRACK WIDTHS GREATER THAN 1"

ASPHALT CRACK REPAIR WITH HOT BITUMINOUS SAND MIX



QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
BY	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

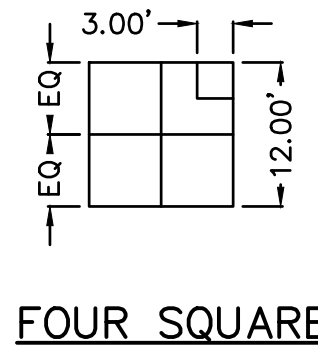
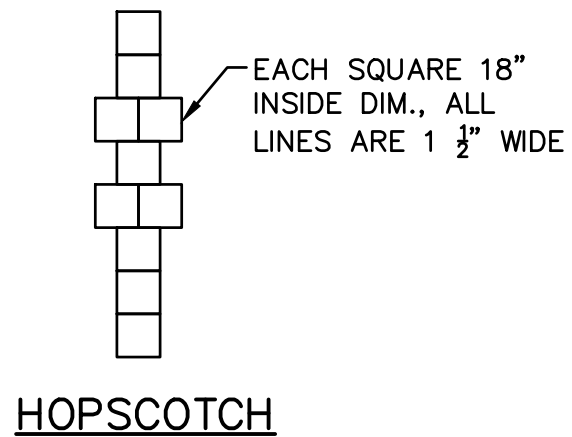
ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

SIERRA ELEMENTARY SCHOOL
 6811 CAMBORNE WAY,
 ROCKLIN, CA 95677
AC PAVEMENT REPAIR DETAILS

Sheet	C4
6 of 8	
01/15/2019	

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\14 SIERRA ELEMENTARY SCHOOL\C1-06 SIERRA ELEM SCHOOL EXHIBIT.dwg Jan 15, 2019-03:05 .pm



NOTES:

1. ALL PLAYCOURT STRIPING WILL BE RE-STRIPED AND RE-PAINTED AS EXISTING.
2. SHOWN DETAILS ARE FOR REFERENCE ONLY. VERIFY ACTUAL DIMENSIONS AND COLORED FINISH ON-SITE.
3. TYPICAL WHITE PAINT LINES ARE 3" WIDE.
4. ALL DIMENSIONS ARE TO INSIDE EDGE OF LINE.

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p> <p>0 1/2 1 1 1/2</p>		
QUANT.							
DRAWN	PGC	RFE					
DESIGN	PGC	RFE					
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK	

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

SIERRA ELEMENTARY SCHOOL
 6811 CAMBORNE WAY,
 ROCKLIN, CA 95677
PLAYCOURT STRIPING DETAILS

Sheet
C5
7 of 8
01/15/2019



TECHNICAL DATA SHEET
STEELGUARD

A single package, water dispersed polymer modified, slate and mineral filled, black, asphalt coating. The product, following minimal dilution with potable water, may be easily applied by squeegee or spray applied with proper, heavy duty commercial equipment. It is designed to restore minor pavement surface profile loss; and to professionally seal all asphalt surfaces against accelerated deterioration from sun, wind, rain, tire abrasion and mild chemical attack.

Available in 5 and 55 gallon containers; and in bulk.

ADVANTAGES:

- May be applied above 50°F (10°C) and rising on most dry or slightly damp surfaces. (May be applied in cooler temperatures with the use of fast drying additives or under favorable conditions - See "Drying").
- SteelGuard provides excellent coverage with a higher film thickness per coat due to higher aggregate/binder content. Helps fill minor surface (non-working) cracks in the pavement to eliminate water penetration.
- SteelGuard provides excellent adhesion.
- Excellent curing properties under normal conditions. Assists in nighttime installations without direct sun loading. Quick-setting additives are available for more challenging installations.
- Will resist re-emulsification once fully cured. Traffic striping immediately after curing may be achieved without discoloration.
- Resistant to tire scuff and power steering abuse.
- Contains no bio-accumulative metals or chemicals. Non-hazardous in cured form; therefore, may be disposed as cured residue into any municipal land fill.

USES:

- Designed for application as a professional protective coating of asphalt pavements including driveways, playgrounds, parking lots, bike paths, surface streets, highways and airport taxiways and runways.
- Available in modified forms for various color applications, skid resistant requirements or for applications in demanding situations or on alternative surface materials.

APPLICATION:

Apply only onto clean, dry or damp surfaces from which all contaminants have been removed; i.e. built-up crankcase drippings, oil spots, loose traffic paint, etc. Areas upon which a high build-up of grease or loose paint exists shall be scraped, wire brushed and cleaned to eliminate oil residue from the underlying, sound asphaltic substrate. Prior to application it is recommended that these treated areas be further prepared by surface priming with an approved Oil Spot Treatment.

SteelGuard may be modified for special applications with a variety of polymers, adhesion packages, set control additives and select size aggregates for friction/skid promotion. Please contact your supplier for details.

SHIPPING INFORMATION:

CONTAINER SIZE	UNITS PER PALLET	CUBIC FT PER PALLET	WEIGHT PER PALLET	PALLETS PER 48' TRAILER
5 Gallon Pails	32	50	~ 1950	18
55 Gallon Drums	4	58	~ 2500	20

PHYSICAL PROPERTIES:

Water Absorption	< 1%	ASTM D-570
Weight per gallon	10.5 – 11.5 lbs/gallon	ASTM D-1475
Percent Solids	57 - 62	
Wet Track Abrasion	<35 grams / s.f.	ISSA A-105, T-100
VOC	< 10 grams / liter	BAAQMD Vol 3 Lab 22

SteelGuard contains 4.5 pounds of crushed aggregate, or more, per gallon and is supplied in a high viscosity, semi-paste consistency. The formula is balanced to provide suspension of the aggregate particles but stirring or mixing should be done prior to use to assure a balanced mix.

Immediately prior to application a pre-determined, small quantity of potable water shall be slowly mixed into the contents at an equivalent rate of one to five percent by volume (1 – 5% under normal conditions; up to as much as 10% under very hot conditions) of the **SteelGuard**.

Do not over dilute this product as this will terminate the anti-settling qualities of the **SteelGuard** and could possibly diminish the useful qualities of its cured physical properties.

DRYING: **SteelGuard** is one of the fastest curing pavement surfacing materials available. However, all waterborne curing rates are dependent upon evaporation of the water contained within the formula. The combined effects of surface temperature, air temperature, sun load, wind and humidity will determine the atmospheric water removal capabilities at any given moment. The professional installer will gain valuable experience in gauging time-to-cure by observing cure times against spread rates within the range of these five indicators.

Do not apply this product unless sufficient weather conditions exist to assure full cure prior to being subjected to rain, fog or other inclement weather or heavy traffic.

It is recommended that the inexperienced applicator use spread rates of 20 gallons per 1000 square foot, during daylight hours, at surface and air temperatures above 55° F (13°C) and rising with no rain, fog or other inclement weather in the forecast for at least 24 hours.

Immediately after application, clean implements, including hoses, with cool water after application. **SteelGuard** may crosslink & cure if left standing in sun exposed spray hoses.

TRANSPORTATION, STORAGE AND HANDLING:

- DOT: not regulated
- Keep/store out of direct sunlight.
- Do not allow to freeze prior to application.
- Do not mix with any other products.
- Keep containers tightly sealed when not in use.
- Avoid prolonged skin contact.
- Do not take internally. Do not induce vomiting if swallowed - call a physician immediately.
- Store, handle and dispose per MSDS requirements.



PRODUCT DATA SHEET
SUPERFLEX HT
PART NO. 34533

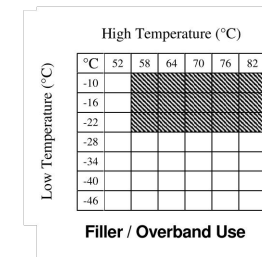
SEPTEMBER 2016

6165 W Detroit St. • Chandler AZ 85226
+1 (602) 276-0406 • +1 (800) 528-8242 • FAX +1 (480) 961-0513
www.crafco.com

READ BEFORE USING THIS PRODUCT

GENERAL Crafco Superflex HT sealant is a hot-applied asphalt based product used to fill cracks in asphalt concrete or Portland cement concrete pavements in moderate to very hot climates. Superflex HT is supplied in solid form which when melted and properly applied forms an adhesive and flexible compound that resists cracking in the winter and is highly resistant to tracking or pick-up by vehicle tires in hot climates. Superflex HT is used in highway, street, airfield and parking lot pavements and is applied to pavement cracks using either pressure feed melter applicators or pour pots. At application temperature, Superflex HT is a low viscosity, self-leveling product which easily penetrates narrow cracks. Superflex HT can be melted in jacketed double type melting units, or in small direct bottom fired types of melters. Both melter types must have sufficient agitation and temperature indicating devices to assure that the material is heated to and maintained within the specified application temperature range of 380° to 400°F (193 to 204°C). VOC = 0 g/l.

USAGE GUIDELINES Superflex HT is applicable for Filler/Overband Use in moderate to very hot climates with high and low pavement temperatures identified in the chart. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBind V 3.1, and sealant or filler use is determined following Crafco Product Selection procedures.



SPECIFICATION CONFORMANCE

Crafco Superflex HT meets the following requirements when heated to the maximum heating temperature in accordance with ASTM D5167:

Tests

Softening Point (ASTM D36)
Flexibility, 1/8" (3.2 mm) specimen, 90° bend, 10 sec., 1" (25mm) mandrel (ASTM D3111 modified)
Cone Penetration (ASTM 5329)
Flow, 140°F (60°C), 5 hr. (ASTM D5329)
Elongation 77°F (25°C) (ASTM D412 die C)
Opening to Traffic Time
Maximum Heating Temperature
Application Temperature Range

Specification Limits

210°F (99°C) min.
Pass at 0°F (-18°C)
45 max.
0 mm.
1000% min.
30 minute max.
400°F (204°C)
380-400°F (193-204°C)

INSTALLATION

The unit weight of Crafco Superflex HT is 9.2 lbs./gal. (1.10 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Superflex Sealants to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of sealant.

PACKAGING

Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x 102 cm) 4-way pallets; can be stored outside, and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.
• **BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
• **PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

WARRANTY

CRAFCO, Inc. warrants that CRAFCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**

©2016, Crafco, Inc., #A1143

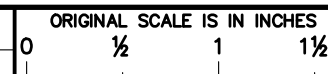
POLYMER MODIFIED SEAL COAT

HOT-APPLIED RUBBERIZED CRACK SEALANT

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\14- SIERRA ELEMENTARY SCHOOL\C1-06 SIERRA ELEM SCHOOL EXHIBIT.dwg, Jan 15, 2019--03:05 pm

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY	APPRV'D



QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEEngineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

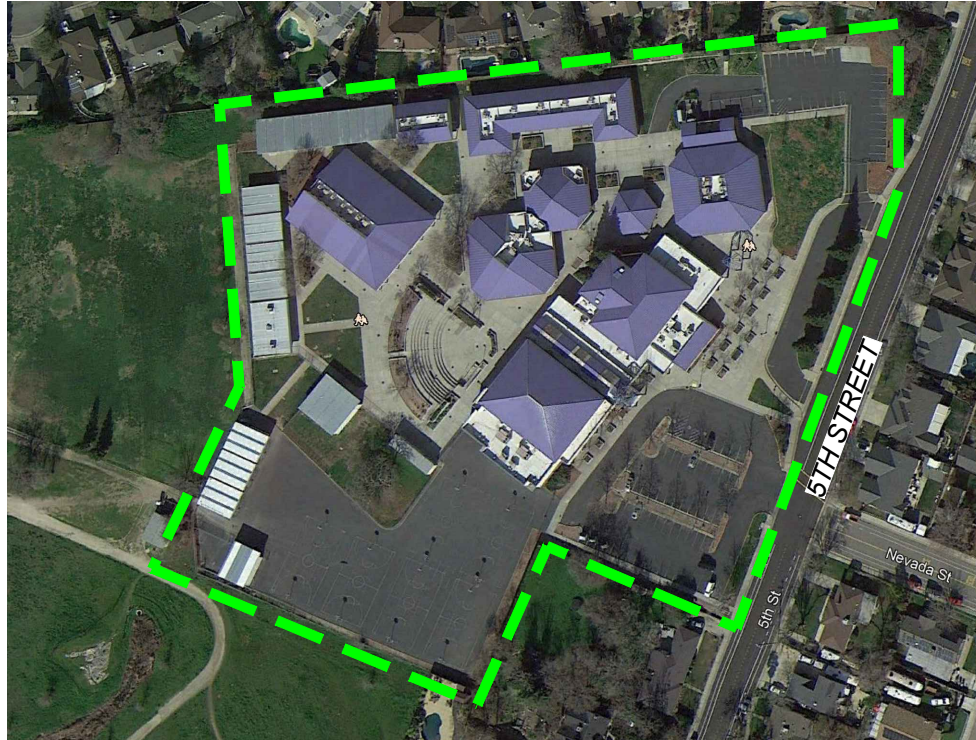
SIERRA ELEMENTARY SCHOOL
6811 CAMBORNE WAY,
ROCKLIN, CA 95677
MATERIAL SPECIFICATONS

Sheet
C6
8 of 8
01/15/2019

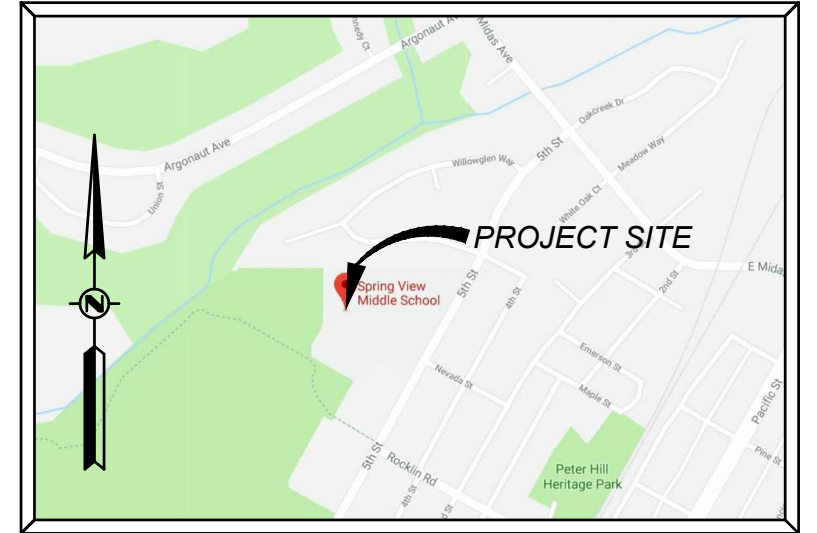
RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

SPRING VIEW MIDDLE SCHOOL PAVEMENT REHABILITATION PLANS

5040 5TH STREET,
ROCKLIN, CA 95677



LIMITS OF IMPROVEMENTS
SCALE: 1"=200'



VICINITY MAP
NOT TO SCALE

SHEET INDEX:

- C1 TITLE SHEET
- C2.1-C2.3 GENERAL NOTES
- C3 AC PAVEMENT REMOVAL, AND REPLACEMENT PLAN
- C4 CRACK FILL, SEAL COAT, AND STRIPING PLAN
- C5 AC PAVEMENT REPAIR DETAILS
- C6 PLAYCOURT STRIPING DETAILS
- C7 MATERIAL SPECIFICATIONS

OWNER:

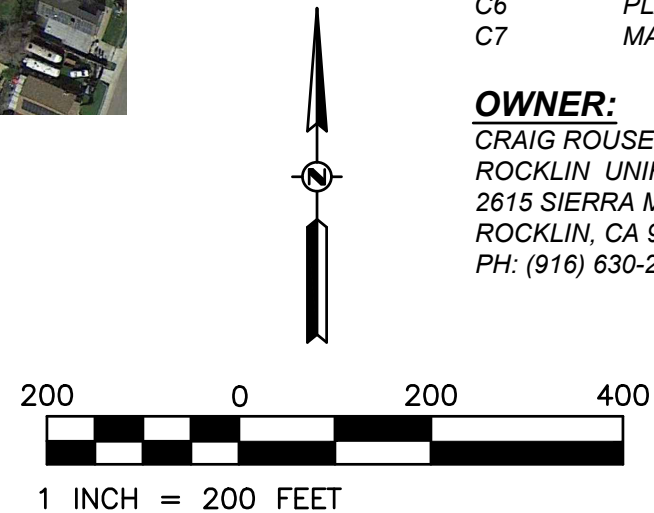
CRAIG ROUSE
ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DRIVE,
ROCKLIN, CA 95677
PH: (916) 630-2246



Know what's below.
Call before you dig.
or (800) 227-2600

NOTICE TO CONTRACTOR :

THIS SET IS BASED ON AERIAL PHOTOGRAPHY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING INFORMATION SHOWN ON THESE PLANS IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING SITE CONDITIONS. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR MUST ALSO CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.



PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES			
					0 1/2 1 1 1/2			
					QUANT.			
					DRAWN	PGC	RFE	
					DESIGN	PGC	RFE	
NO.	REVISION	DATE	BY	APPRV'D		BY	CHECK	

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

**ROCKLIN UNIFIED
SCHOOL DISTRICT**
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

SPRING VIEW MIDDLE SCHOOL
5040 5TH STREET,
ROCKLIN, CA 95677
TITLE SHEET

Sheet	C1
	1 of 9
	01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\C1-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019-02:46 .pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

TECHNICAL SPECIFICATIONS:

TS-1 THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER.

TS-2 NOTIFICATIONS
IN ORDER TO ALLOW THE OWNER SUFFICIENT TIME TO NOTIFY THE VARIOUS OCCUPANTS OF UPCOMING WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AT LEAST TEN (10) WORKING DAYS BEFORE COMMENCING WORK ON ANY PORTION OF THE WORK.

TS-3 CONTROL OF MATERIALS
ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED IN A WORKMANLIKE MANNER. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE AREAS OF WORK SHOWN ON THE PLANS.
THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO VERIFY WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER.
INITIAL TESTING DONE TO DETERMINE SPECIFICATION COMPLIANCE WILL BE PERFORMED AND PAID FOR BY THE OWNER. IF ANY PARTICULAR PORTION OF THE WORK DOES NOT PASS THIS TESTING, IT SHALL BE SUBJECT TO A RETEST AFTER THE CONTRACTOR FEELS HE HAS REMEDIATED THE DEFICIENCY. **ALL RETESTING WILL BE PAID FOR BY THE CONTRACTOR.**
IN THE EVENT THAT THE OWNER DOES NOT PROVIDE ON-SITE INSPECTION DURING CONSTRUCTION, THE CONTRACTOR IS HEREBY NOTIFIED THAT TWO OR MORE CORE TESTS WILL BE TAKEN TO CHECK FOR COMPLIANCE TO THESE SPECIFICATIONS. IF DEFICIENCIES IN MATERIAL QUALITY, THICKNESS, OR DENSITIES ARE DETERMINED, THE ENTIRE AREA REPRESENTED BY THAT TEST SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. IN ADDITION, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ADDITIONAL TESTING TO DETERMINE COMPLIANCE OF ALL OTHER AREAS TESTED. ALL NON-COMPLYING AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. **ANY CONDITIONS RESULTING IN COST OVERRUNS ON THIS PROJECT MUST BE PHOTO DOCUMENTED IF AN ON-SITE INSPECTOR IS NOT PRESENT TO VERIFY QUANTITIES.**

TS-4 WORK SCHEDULE AND PUBLIC SAFETY
FIVE (5) DAYS PRIOR TO INITIATING THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE OF WORK TO THE ENGINEER FOR HIS REVIEW. THE PLAN SHALL CLEARLY INDICATE HOW THE WORK IS TO BE LAID OUT AND THE ORDER IN WHICH INDIVIDUAL AREAS WILL BE COMPLETED. THE GOAL OF THIS REQUIREMENT IS TO ENSURE THAT PUBLIC TRAFFIC IS SAFELY MAINTAINED AND THAT THERE IS ADEQUATE PUBLIC ACCESS TO THE SITE.
CONTRACTOR IS RESPONSIBLE FOR BARRICADING OR TAPING OFF THE WORK TO BE COMPLETED EARLY ENOUGH IN ADVANCE TO ASSURE NO VEHICLES OR OTHER OBSTACLES ARE LEFT IN THE WAY OF CONSTRUCTION.

TS-5 TRAFFIC CONTROL
CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL NECESSARY TO MAINTAIN PUBLIC SAFETY AND ACCESS TO THE PROJECT SITE. PREAPPROVAL BY THE ENGINEER IS REQUIRED BEFORE IMPOSING ANY TRAFFIC CLOSURES. TRAFFIC CONTROL MAY INVOLVE FLAGMEN, GUARDS, BARRICADES, SIGNS, LIGHTS, FLARES, RADIOS, AND OTHER FACILITIES.
THE CONTRACTOR SHALL INCLUDE TRAFFIC CLOSURES IN THE PROPOSED WORK SCHEDULE SUBMITTAL AS DESCRIBED IN SECTION TS-8, "WORK SCHEDULE, AND PUBLIC SAFETY."

FULL COMPENSATION FOR PROVIDING TRAFFIC CONTROL, INCLUDING LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS, SHALL BE CONSIDERED INCLUDED IN THE VARIOUS ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.

TS-6 DUST CONTROL
THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.

TS-7 BEFORE EXECUTION OF ANY WORK, THE CONTRACTOR SHALL EXAMINE ACTUAL JOB CONDITIONS AND REPORT TO RFE ENGINEERING, INC. ANY ERROR, OMISSION, OR DISCREPANCY AFFECTING WORK. UPON COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO RFE ENGINEERING, INC. IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER OR CITY ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. ANY COST INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TS-8 THE CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK THAT IS CONSTRUCTED.

TS-9 THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER "AS BUILT" DRAWINGS AT PROJECT COMPLETION. THE CONTRACTOR SHALL PROVIDE ONE COMPLETE ACCURATE SET OF RECORD CHANGES. THE CHANGES SHALL BE PLACED ON A CLEAN SET OF PROJECT DRAWINGS IN RED, AND GIVEN TO THE ENGINEER AT JOB COMPLETION.

TS-10 THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE QUANTITIES FOR BID AND FIELD INSTALLATION.

TS-11 THESE DRAWINGS ARE FOR THIS SPECIFIC PROJECT AND NO OTHER USE IS AUTHORIZED. RFE ENGINEERING, INC. DISCLAIMS ALL RESPONSIBILITY FOR CONSTRUCTION BEYOND WHAT IS SPECIFICALLY DESIGNED OR DETAILED HEREIN.

TS-12 EROSION CONTROL NOTES
EROSION AND SEDIMENTATION CONTROL PROGRAM: THE LOCATION OF EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THESE PLANS MAY VARY ACCORDING TO THE SEASON AND PHASE OF CONSTRUCTION. THE OBJECTIVE OF THESE MEASURES IS TO MITIGATE THE EROSION AND SEDIMENTATION IMPACTS.

MAINTENANCE PROGRAM: THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE EROSION AND SEDIMENTATION MITIGATION MEASURES ON ALL DISTURBED AREAS BEFORE, DURING, AND AFTER STORMS. THE CONTRACTOR SHALL ENSURE THAT THE EROSION AND SEDIMENTATION MEASURES ARE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS.

INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. WINTERIZATION AND EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

TS-13 DEMOLITION PLAN NOTES
SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION. ENGINEER SHALL VERIFY LIMITS OF DEMOLITION. PROTECT EXISTING PAVEMENT THAT WILL REMAIN.

THE DISPOSAL OF ALL DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS. ANY PERMITS REQUIRED FOR SUCH DISPOSAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.

TS-14 FULL-DEPTH AC PAVEMENT REPAIR OR RECONSTRUCTION

GENERAL
AREAS DESIGNATED BY THE ENGINEER SHALL BE DUG OUT TO A DEPTH AS SHOWN ON THE PLANS, REMOVED AND REPLACED WITH THE SAME THICKNESS OF AC, UNLESS OTHERWISE DIRECTED ON THE CONTRACT PLANS. THE AC SHALL BE PLACED IN TWO (2) EQUAL LIFTS. THE FINAL LIFT MUST BE 1.5 INCHES THICK OR GREATER. **THE COMMON PRACTICE OF CAPPING DIGOUTS WITH A THIN LIFT OF ASPHALT IS NOT ACCEPTABLE.**

MATERIALS
THE ASPHALT CONCRETE USED FOR THIS WORK SHALL CONFORM TO ALL REQUIREMENTS OF **SECTION TS-11**, "ASPHALT CONCRETE," OF THESE TECHNICAL SPECIFICATIONS. TACK COAT EMULSION SHALL BE SS-1H.

CONSTRUCTION
THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR DISPOSAL OF EXCAVATED MATERIALS. ALL EDGES SHALL BE SAW-CUT OR MILLED. IF A MILLING MACHINE IS USED, ALL SLOPING EDGES SHALL BE CHIPPED TO A VERTICAL FACE. EXPOSED EDGES SHALL BE PROTECTED AGAINST BREAKAGE WITH TIMBERS OR AC MIX WHENEVER A ROLLER ENTERS OR LEAVES THE REPAIR SPOT.

THE UNDERLYING MATERIAL TO REMAIN IN PLACE SHALL BE RECOMPACTED TO 95 PERCENT MINIMUM RELATIVE COMPACTION AS DETERMINED BY AASHTO TESTS T180 AND T238 TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE REPAIR. AFTER COMPACTION AND PRIOR TO THE PLACING OF ASPHALT CONCRETE, THE VERTICAL EDGES OF THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT.
WHENEVER THE SURFACE COURSE OF AC IS PLACED MORE THAN FOUR HOURS AFTER THE BASE COURSE OR, IN THE OPINION OF THE ENGINEER, CONTAMINATION BY DIRT OR DUST HAS CAUSED THE BASE COURSE TO LOSE ITS TACKINESS, A TACK COAT SHALL BE APPLIED TO THE ENTIRE AREA OF THE REPAIR BEFORE PLACING THE SURFACE COURSE. TACK COAT SHALL BE APPLIED AT A RATE EQUIVALENT TO 0.05 TO 0.15 GALLONS PER SQUARE YARD.
THE FINISHED REPAIR SHALL CONFORM TO THE SURROUNDING GRADE AND CONTOUR AND SHALL NOT TRAP WATER OR PRESENT A VISIBLE HUMP.

ASPHALT CONCRETE SHALL BE COMPACTED TO A MINIMUM 93 PERCENT OF MAXIMUM THEORETICAL DENSITY (DENSITY WITH ZERO AIR VOIDS) AS DETERMINED BY AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) D-2041.

UNSUITABLE MATERIAL
IN THE EVENT THAT THE UNDERLYING MATERIAL IS UNSUITABLE, IT SHALL BE EXCAVATED BELOW THE DEPTH REQUIRED ABOVE AND DISPOSED OF IN ACCORDANCE WITH THESE SPECIAL PROVISIONS. THE LIMITS OF REMOVAL SHALL BE DESIGNATED BY THE ENGINEER. THE RESULTING SPACE SHALL BE FILLED WITH A SINGLE LIFT OF ASPHALT CONCRETE.


UNSUITABLE MATERIAL IS DEFINED AS MATERIAL THE ENGINEER DETERMINES TO BE:

- a. OF SUCH UNSTABLE NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS AT OPTIMUM MOISTURE CONTENT; OR
- b. TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE IN-PLACE DRYING PRIOR TO INCORPORATION INTO THE WORK; OR
- c. OTHERWISE UNSUITABLE FOR THE PLANNED USE.

TS-15 TACK COAT
AN ASPHALT EMULSION TACK COAT SHALL BE APPLIED TO ALL VERTICAL SURFACES OF EXISTING PAVEMENT, CURBS, GUTTERS, AND CONSTRUCTION JOINTS, AGAINST WHICH ADDITIONAL MATERIAL IS TO BE PLACED.
ADDITIONALLY, WHEN PLACING AN OVERLAY WITHOUT FABRIC, THE TOP LIFT OF A FULL-DEPTH AC REPAIR, OR AC LEVELING, PAVING SHALL BE PRECEDED BY A TACK COAT OVER THE ENTIRE SURFACE UNLESS THE EXISTING SURFACE HAS BEEN PLACED WITHIN THE LAST FOUR HOURS AND, IN THE OPINION OF THE ENGINEER, IS CLEAN ENOUGH TO BOND WITHOUT THE NEED FOR A TACK COAT.
THE TACK COAT SHALL BE SS-1H, MEETING THE REQUIREMENTS OF SECTION 94 OF THE STATE STANDARD SPECIFICATIONS. FULL COMPENSATION FOR FURNISHING AND APPLYING ASPHALT EMULSION TACK COAT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEMS INVOLVING ASPHALT CONCRETE.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\1-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019 - 02:46 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p> <p>0 1/2 1 1 1/2</p>	 <p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT</p> <p>2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>SPRING VIEW MIDDLE SCHOOL 5040 5TH STREET, ROCKLIN, CA 95677</p> <p>GENERAL NOTES</p>	<p>Sheet</p> <p>C2.1</p>												
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>QUANT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> </table>				QUANT.				DRAWN	PGC	RFE		DESIGN	PGC	RFE		<p>2 of 9</p>
QUANT.																					
DRAWN	PGC	RFE																			
DESIGN	PGC	RFE																			
NO.	REVISION	DATE	BY	APPRV'D					<p>01/15/2019</p>												

TS-16 TASPALHT CONCRETE

GENERAL

THE FOLLOWING PROVISIONS FOR ASPHALT CONCRETE MATERIAL SHALL APPLY TO WORK COMPLETED WITHIN THESE SPECIFICATIONS.

MATERIALS

ASPHALT CONCRETE SHALL COMPLY WITH THE PROVISIONS OF SECTION 39 OF THE CALIFORNIA STATE STANDARD SPECIFICATIONS AND AS MODIFIED HEREWITH. THE REQUIREMENTS PROVIDED WITHIN THESE SPECIAL PROVISIONS SHALL SUPERSEDE STATE SPECIFICATIONS WHERE CONFLICTS OR OTHER DISPARITIES EXIST. THE USE OF AGGREGATE SOURCE STEMMING FROM BEAR RIVER OR ANY SIMILAR SOURCE OF AGGREGATE THAT IS KNOWN TO CONTAIN A SIGNIFICANT AMOUNT OF QUARTZITE MATERIAL IS NOT TO BE USED IN PRODUCTION OF ASPHALT CONCRETE MATERIALS FOR THIS PROJECT.

ASPHALT CONCRETE SHALL BE HOT PLANT MIXED AND SHALL BE FURNISHED FROM THE PLANT AT A TEMPERATURE NOT TO EXCEED 325 DEGREES F.

ASPHALT CONCRETE FOR PAVING WORK SHALL BE **TYPE A OR B, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED, STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

ASPHALT CONCRETE FOR PAVEMENT REPAIR WORK SHALL BE **TYPE A OR B, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED; STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

THE ACTUAL ASPHALT CEMENT CONTENT MAY VARY UP TO 0.3% PLUS/MINUS FROM THE TARGET OPTIMUM BITUMEN CONTENT (OBC) UNLESS THE JOB-MIX-DESIGN AND FINAL PRODUCT INDICATE THE REQUIRED PROVISIONS ARE NOT MET.

NOTE: AT THE OBC, THE COMPACTED MIXTURE SHALL HAVE THE FOLLOWING PROPERTIES:

HVEEM STABILITY 35 MIN. TYPE B
37 MIN. TYPE A

THE SUGGESTED JOB-MIX-DESIGN AIR VOIDS BELOW ARE PROVIDED TO HELP OBTAIN COMPACTION REQUIREMENTS IN THE FIELD AND ARE NOT A SPECIFICATION REQUIREMENT.

AIR VOIDS 3% TO 5%
ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED TO INDUSTRY STANDARDS.

SUBMITTALS

THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER FOR REVIEW AND APPROVAL, AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, A LIST OF HIS SOURCES OF MATERIALS TOGETHER WITH A CERTIFICATE OF COMPLIANCE, INDICATING THAT MATERIALS TO BE INCORPORATED IN THE WORK FULFILL THE REQUIREMENTS OF THESE SPECIFICATIONS AND THE JOB-MIX-DESIGN FOR THE ASPHALT CONCRETE. THE CERTIFICATE OF COMPLIANCE SHALL BE SIGNED BY THE MATERIAL SUPPLIER OR HIS REPRESENTATIVE. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE PAVED AREAS SHOWN ON THE PLANS.

AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, THE CONTRACTOR SHALL ALSO FURNISH A **JOB-MIX-DESIGN** FOR THE ASPHALT CONCRETE. THE JOB-MIX-DESIGN SHALL INDICATE ALL OF THE FOLLOWING:

1. PERCENTAGE PASSING EACH SIEVE SIZE
2. PERCENT ASPHALT RECOMMENDED
3. PERCENT VOIDS*
4. STABILITY*
5. MAXIMUM THEORETICAL UNIT WEIGHT*

THE * ITEMS SHALL BE PROVIDED AT EACH ASPHALT CONTENT USED TO ARRIVE AT THE RECOMMENDED OPTIMUM BITUMEN CONTENT.

THE JOB-MIX-DESIGN SHALL BE IN EFFECT UNTIL A CHANGE IS APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

TS-17 ADJUST UTILITY COVERS

STORM DRAIN AND SEWER MANHOLE COVERS, CLEANOUTS, WATER VALVE COVERS, UTILITY VAULT AND OTHER SUCH UTILITY ACCESS COVERS, WITHIN AREAS TO BE PAVED WITH ASPHALT CONCRETE SHALL BE ADJUSTED BY THE CONTRACTOR TO THE NEW FINISHED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE NUMBER OF UTILITY COVERS TO BE ADJUSTED, ACCURATELY REFERENCING ALL COVERS PRIOR TO PAVING AND ADJUSTING THE COVERS AFTER PAVING HAS BEEN COMPLETED.

CUTTING OF THE NEW PAVEMENTS TO MAKE UTILITY COVER ADJUSTMENTS SHALL BE ACCOMPLISHED WITHOUT DISTURBING OR DEFORMING ASPHALT CONCRETE THAT IS TO REMAIN. DEFORMED ASPHALT CONCRETE SHALL BE REMOVED AND REPAIRED AS DIRECTED BY THE ENGINEER.

UNLESS OTHERWISE SPECIFIED BY THE UTILITY OWNER, COVER FRAMES ARE TO BE SET TO GRADE AND BACKFILLED TO WITHIN 1 1/2 INCHES OF THE FINISHED SURFACE WITH PORTLAND CEMENT CONCRETE. ASPHALT CONCRETE CONFORMING TO THE PROVISIONS IN SECTION TS-11 OF THESE TECHNICAL SPECIFICATIONS SHALL BE USED TO COMPLETE THE RESTORATION TO THE NEW FINISHED SURFACE. SURFACE TOLERANCES AS SPECIFIED FOR ASPHALT CONCRETE OVERLAY SHALL APPLY TO THE RESTORATION OF PAVING SURFACES, INCLUDING THE POSITIONING OF UTILITY COVERS AND FRAMES.

COMPENSATION FOR FURNISHING LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH UTILITY COVER ADJUSTMENT.

TS-18 SURFACE SEAL COAT (TWO COATS)

GENERAL

THIS WORK SHALL CONSIST OF PREPARING THE SURFACE OF EXISTING ASPHALT CONCRETE PAVEMENT AND APPLYING A SEAL COAT COMPOSED OF A PETROLEUM ASPHALT EMULSION, LATEX POLYMER, AND MINERAL AGGREGATE. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS FOR DOING ALL OF THE WORK NECESSARY TO SEAL COAT THE AREAS DESIGNATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED MUST BE ERADICATED PRIOR TO THE SEAL COAT APPLICATION.

MATERIALS

THE ASPHALT EMULSION SEAL COAT MATERIAL TO BE FURNISHED AND APPLIED BY THE CONTRACTOR SHALL BE **REED & GRAHAM'S OVERKOTE**, OR APPROVED EQUAL. **NOTE: COAL TAR EMULSION AND GILSONITE PRODUCTS ARE NOT ACCEPTABLE.**

SEAL COAT MATERIAL DELIVERED FOR USE ON THE WORK SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

1. RESIDUE AT 300 - 400 DEGREES F., % 60 - 70
2. DEHYDRATION, 96 HOURS AT 100 DEGREES F. 0.6 MIN
3. SOLUBILITY OF RESIDUE IN C2HCL 15 - 20
4. LOSS ON IGNITION OF INSOLUBLE RESIDUE % 16 MAX
5. CONE PENETRATION AT 77 DEGREES F., DMM 400 - 700

MIX DESIGN COMPOSITION:

FIRST APPLICATION

100 GALLONS SEAL COAT MATERIAL
300 POUNDS SILICA SAND (30 MESH) (IF NOT INCLUDED IN SEAL MATERIAL)
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF PORTABLE WATER FOR DILUTION

SECOND APPLICATION

100 GALLONS SEAL COAT MATERIAL
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF POTABLE WATER FOR DILUTION

DILUTION OF SEAL MATERIAL WITH WATER FOR EASE OF APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ANY WATER ADDITION SHALL BE CAREFULLY MEASURED INTO A KNOWN VOLUME OF SEAL MATERIAL. AGGREGATE SHALL BE EITHER NATURAL OR MANUFACTURED PRODUCT COMPOSED OF CLEAN, HARD, DURABLE PARTICLES FREE FROM DIRT, ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A CERTIFICATE FROM THE SUPPLIER OF THE SEAL COAT MATERIAL GIVING THE TRADE NAME OF THE SEALER AND VERIFICATION THAT THE SEALER CONFORMS TO THESE SPECIFICATIONS.

APPLICATION

THE SURFACE TO BE SEALED SHALL BE CLEANED TO REMOVE ALL ORGANIC MATERIALS, SAND, DUST, AND CLAY. PRIOR TO PLACING THE SEAL, CRACKS SHALL BE FILLED, AND ALL AREAS CAPABLE OF PONDING WATER GREATER THAN 3/8 INCH IN DEPTH SHALL BE PRE-LEVELLED AS NECESSARY TO ELIMINATE THE POSSIBILITY OF STANDING WATER.

BEFORE PLACING THE SEAL, ALL AREAS OF WATER DAMAGED (RAVELED) PAVEMENT IN EXCESS OF 1/8 INCH REMOVED ASPHALT CONCRETE SHALL RECEIVE ONE PRECOAT OF UNDILUTED EMULSIFIED ASPHALT SEAL MATERIAL WITH 5 POUNDS OF SAND PER GALLON OF SEAL. THE PRECOAT SHALL FILL THE RAVELED PAVEMENT AND PROVIDE A SMOOTH, NEAT SURFACE PRIOR TO PLACEMENT OF THE TWO COATS OF DILUTED SEAL MATERIAL.

ACCUMULATIONS OF OIL AND GREASE THAT MAY ADVERSELY AFFECT SEAL COAT BONDING SHALL BE REMOVED BY GRINDING, SCRAPING, OR SCRUBBING WITH TRISODIUM PHOSPHATE OR AN EQUALLY EFFECTIVE INDUSTRIAL DETERGENT. PAVEMENT AREAS REDUCED BY GRINDING SHALL RECEIVE A TACK COAT AND SKIN PATCH OF 1/4 INCH AC MIX. PAVEMENT AREAS CLEANED WITH DETERGENT SHALL BE THOROUGHLY RINSED WITH WATER AND ALLOWED TO DRY. PRIOR TO SEAL COATING, THE CLEANED AREAS SHALL BE TREATED WITH A PROPRIETARY OIL STAIN PRE-TREATMENT OR A 1:1 SOLUTION OF ISOPROPYL ALCOHOL AND SHELLAC.

SEAL SHALL NOT BE APPLIED TO A WET SURFACE NOR WHEN RAIN OR FREEZING WEATHER IS EXPECTED WITHIN 24 HOURS. AIR AND PAVEMENT TEMPERATURE AT TIME OF APPLICATION SHALL BE BETWEEN 60 AND 95 DEGREES F. AND NO SEAL COAT SHALL BE APPLIED WHEN THE AIR TEMPERATURE IS 60 DEGREES F OR LESS. ALSO, OTHER CONDITIONS ARE AS FOLLOWS:

MINIMUM FOUR (4) HOURS OF SUNSHINE EXPECTED IN NEXT TEN (10) HOURS, RELATIVE HUMIDITY BELOW 50% AND WIND SPEED MINIMUM OF FIVE (5) MILES PER HOUR.


THE CONTRACTOR MAY, BASED ON HIS OWN EXPERIENCE, APPLY SEAL COAT DURING FAVORABLE DRYING CONDITIONS WHEN ONE MAJOR POSITIVE FACTOR IN DRYING SUCH AS SUNSHINE, SURFACE TEMPERATURE, HIGH AIR TEMPERATURE, OR LOW HUMIDITY COMPENSATE FOR OTHER NEGATIVE FACTORS. PRIOR TO PLACING THE FIRST COAT OF SEAL COAT IN EXCEPTIONALLY HOT WEATHER, THE SURFACE SHALL BE DAMPENED WITH WATER. ALL EXCESS WATER SHALL BE REMOVED TO LEAVE THE SURFACE ONLY SLIGHTLY DAMP.

Z:\2018 Projects\18113_Rocklin_Schools_Pavement_Evaluation\WORKING CAD\13_SPRINGVIEW_ELEMENTARY_SCHOOL\CI-C7_SPRINGVIEW_EXHIBIT.dwg, Jan 18, 2019--08:04 am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1
0	1/2	1
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK



RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

SPRING VIEW MIDDLE SCHOOL
5040 5TH STREET,
ROCKLIN, CA 95677
GENERAL NOTES

Sheet
C2.2
3 of 9
01/15/2019

TS-19 EMULSIFIED ASPHALT CRACK SEAL

GENERAL

THIS WORK APPLIES TO ALL CRACKS AND JOINTS IN AND ADJACENT TO THE ASPHALT CONCRETE PAVEMENT AS INDICATED ON THE PLANS. FOR CRACKS AND JOINTS 1/4 INCH AND WIDER, THE WORK CONSISTS OF CLEANING, STERILIZING WHERE WEEDS ARE PRESENT, FILLING WITH EMULSIFIED ASPHALT CRACK SEAL AND COVERING WITH SAND. FOR CRACKS AND JOINTS LESS THAN 1/4 INCH WIDE, THE WORK CONSISTS ONLY OF WEED CLEANING AND STERILIZATION.

NO ROUTING OF PAVEMENT IS REQUIRED FOR THIS PROJECT.

MATERIALS

CRACK SEAL SHALL BE AN EMULSIFIED MATERIAL THAT CAN BE READILY HANDLED AT AMBIENT TEMPERATURES, CAN BE STORED FOR PERIODS OF UP TO SIX MONTHS, AND IS MADE WITH BASE MATERIALS THAT WILL REMAIN DUCTILE WITH AGING AND PROVIDE RESILIENCY UNDER EXTREME CLIMATIC CONDITIONS.

THE SEALANT SHALL CONTAIN NO VOLATILE ORGANIC COMPOUNDS WHICH CONTRIBUTE TO AIR POLLUTION AND SHALL CONFORM TO THE REQUIREMENTS IN THE FOLLOWING TABLE:

PROPERTY	TEST METHOD	REQUIREMENTS
VISCOSITY @ 77 F (25 C), SFS	ASTM D-244-76	25-150
PUMPING STABILITY	GB METHOD (1)	PASS
5-DAY SETTLEMENT TEST, PERCENT	ASTM D-244-76	5.0 MAXIMUM
CEMENT MIXING TEST, PERCENT	ASTM D-244-76	2.0 MAXIMUM
SIEVE TEST, PERCENT	ASTM D-244-76	0.1 MAXIMUM
PARTICLE CHARGE TEST	ASTM D-244-76	POSITIVE
RESIDUE, PERCENT	ASTM D-244-76 (MOD) (3)	62 MINIMUM
TEST OF RESIDUE	ASTM D-244-76	
VISCOSITY AT 140 F (60 C), CS.	ASTM D-244-76	1000-4000

NOTES:

- PUMPING STABILITY IS DETERMINED BY CHARGING 450 ML. OF EMULSION INTO A ONE-LITER BEAKER AND CIRCULATING EMULSION THROUGH A GEAR PUMP (ROPER 29 B22621) HAVING 1/4 INCH INLET AND OUTLET. THE EMULSION PASSES IF THERE IS NO SIGNIFICANT OIL SEPARATION AFTER CIRCULATING TEN MINUTES.
- TEST PROCEDURE IDENTICAL WITH ASTM D-244 EXCEPT THAT DISTILLED WATER SHALL BE USED IN PLACE OF TWO PERCENT SODIUM OLEATE SOLUTION.
- ASTM D-244 EVAPORATION TEST FOR PERCENT OF RESIDUE IS MODIFIED BY HEATING A 50 GRAM SAMPLE TO 300 F (149 C) UNTIL FOAMING CEASES, THEN COOLING IMMEDIATELY AND CALCULATING RESULTS.

THE VENDOR SHALL FURNISH CERTIFICATION THAT THE CRACK SEALANT MATERIAL COMPLIES WITH THE ABOVE REQUIREMENTS. SAND COVER SHALL BE FREE FROM CLAY OR ORGANIC MATERIAL AND SHALL BE OF SUCH SIZE THAT FROM 90 PERCENT TO 100 PERCENT WILL PASS A NO. 4 SIEVE AND NOT MORE THAN 10 PERCENT WILL PASS A NO. 200 SIEVE.

APPLICATION

IMMEDIATELY BEFORE APPLYING THE SEALANT, CRACKS AND JOINTS SHALL BE CLEANED BY MECHANICAL OR HAND METHODS FOLLOWED BY BLAST CLEANING WITH HIGH-PRESSURE AIR JETS TO REMOVE ALL RESIDUE AND FOREIGN MATERIAL TO A MINIMUM DEPTH OF THREE-QUARTER (3/4) INCH. WATER JETS SHALL NOT BE ALLOWED. CRACK SURFACES SHALL BE SURFACE DRY AT THE TIME THE SEALANT IS APPLIED. CRACK SEALANT MATERIAL MAY BE SPREAD WITH ANY TYPE NOZZLE OR DEVICE THAT WILL PLACE THE MATERIAL WITHIN THE SPECIFIED TEMPERATURE RANGE AND TO THE DIMENSIONS SHOWN ON THE PLANS AND IS APPROVED FOR USE BY THE ENGINEER.

CRACK SEALANT SHALL BE PLACED AT A TEMPERATURE SUCH THAT THE SEALANT TEMPERATURE PLUS AIR TEMPERATURE FALLS WITHIN A RANGE OF 150 TO 200 DEGREES FAHRENHEIT.

WHEN CURED, CRACK SEALANT SHALL BE AT LEAST FLUSH WITH THE PAVEMENT SURFACE OR EXTEND NO MORE THAN ONE-EIGHTH (1/8) INCH ABOVE THE PAVEMENT SURFACE. **NOTE: THE COMMON PRACTICE OF "BAND-AIDING" A THICK RIBBON OF CRACK SEALANT TO THE PAVEMENT SURFACE IS NOT ACCEPTABLE.**

CRACKS SHALL BE COVERED WITH CLEAN SAND IMMEDIATELY FOLLOWING PLACEMENT OF THE SEALANT MATERIAL TO PREVENT TRACKING OF SEALANT BY VEHICLES OR PEDESTRIANS.

A LIGHT BROOMING SHALL BE PERFORMED TO REMOVE LOOSE SAND BEFORE TO THE END OF EACH DAY'S WORK OR AS A FIRST ORDER OF WORK ON THE MORNING FOLLOWING APPLICATION OF THE SAND COVER. THE EXACT TIME OF BROOMING WILL BE DETERMINED BY THE ENGINEER.

TS-20 PAINT MARKINGS

DESCRIPTION

THIS WORK SHALL CONSIST OF CONSTRUCTING **PAINTED PARKING STALL LINES, TRAFFIC STRIPES, CURBS, LEGENDS, AND WALKWAY DELINEATION** TO THE LAYOUT AND COLOR THAT EXISTED PRIOR TO COMMENCEMENT OF THE CONTRACT WORK, UNLESS OTHERWISE DIRECTED BY THE PROJECT PLANS OR BY THE ENGINEER. THIS WORK ALSO INCLUDES RETOUCHING PREVIOUSLY PAINTED SURFACES MARRED BY CONSTRUCTION ACTIVITIES AND ERADICATING EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED. RESTRIPING IS NOT REQUIRED IN AREAS WITH NO CONSTRUCTION ACTIVITY UNLESS SPECIFICALLY NOTED.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO THE PROVISIONS OF SECTION **TS-19** OF THESE SPECIFICATIONS, TITLE III OF THE AMERICANS WITH DISABILITIES ACT AND ANY LOCAL CODES AS THOSE PROVISIONS RELATE TO RESTRIPING FOR HANDICAP ACCESS.

MATERIALS

PAINT FOR ASPHALT CONCRETE OR ASPHALT SEAL COATED SURFACES SHALL BE A WATER BORNE ACRYLIC AS MAY BE PERMITTED BY LOCAL AIR POLLUTION REGULATIONS, RAPID OR REGULAR DRY AT THE OPTION OF THE CONTRACTOR, COMMERCIALY AVAILABLE AND SPECIFIED BY THE MANUFACTURER AS BEING SUITABLE FOR MARKING AND STRIPING OF SEAL COATED AND NEW ASPHALT PAVEMENTS. PAINT FOR PORTLAND CEMENT SURFACES SHALL BE OIL BASED.

SURFACE PREPARATION

BEFORE APPLYING PAINT, THE PAVEMENT SURFACE SHALL BE CLEANED BY SWEEPING, BLOWING, VACUUMING, OR WASHING AS NECESSARY TO REMOVE MOISTURE, DIRT, OILS, GREASE, ACIDS, LAITANCE OR OTHER FOREIGN MATTER WHICH WOULD REDUCE THE BOND BETWEEN PAINT AND THE PAVEMENT.

CONTROL POINTS

THE CONTRACTOR SHALL LAY OUT ALL NECESSARY CONTROL POINTS FOR MARKINGS AND STRIPES.

MIXING

MECHANICAL MIXERS SHALL BE USED TO MIX PAINT. PRIOR TO APPLYING, THE PAINT SHALL BE MIXED TO UNIFORMLY BLEND PIGMENT AND SOLVENT TOGETHER, AND SHALL BE KEPT THOROUGHLY AGITATED DURING APPLICATION.

APPLICATION

ALL EQUIPMENT USED SHALL PRODUCE MARKINGS AND STRIPES OF UNIFORM QUALITY, TRUE TO LINE AND SPECIFIED THICKNESS.

PAINTED MARKINGS INCLUDING ARROWS, LEGENDS, STRIPING, AND CURBS ON ALL PAVEMENT SURFACES WITHIN THE AREA OF WORK ARE TO BE REPLACED WITH TWO (2) COATS OF PAINT. A CLEANING PRIOR TO SECOND COAT OR TRAFFIC CONTROL REQUIRED TO PROTECT THE PAINT SHALL BE INCLUDED IN THIS ITEM AT NO ADDITIONAL COST TO THE OWNER.

PAINTING SHALL BE APPLIED ONLY ON DRY SURFACE, WHEN TEMPERATURES ARE 50 DEGREES F., OR ABOVE, AND WHEN RAIN, FOG OR CONDENSATION WILL NOT CAUSE DAMAGE. PAINTING SHALL BE CEASED WHENEVER IT IS DETERMINED BY THE ENGINEER THAT WIND WILL PREVENT PROPER PAINT APPLICATION.

THE RATE OF PAINT APPLICATION SHALL BE ONE GALLON TO 125 SQUARE FEET, OR SUFFICIENT TO PRODUCE A WET FILM THICKNESS NOT LESS THAN 15 MILS.

THE CONTRACTOR SHALL PROVIDE NECESSARY PROTECTION FOR PAINTED SURFACES TO PROTECT FROM DAMAGE BY TRAFFIC AND PEDESTRIANS.

TS-21 WATERING

THE CONTRACTOR SHALL NOT DRAW WATER FROM ANY FIRE HYDRANT, EXCEPT TO EXTINGUISH A FIRE, WITHOUT FIRST OBTAINING PERMISSION (AND A METER IF REQUIRED) FROM THE WATER AGENCY CONCERNED.

FULL COMPENSATION FOR DEVELOPING WATER SUPPLY AND APPLYING WATER, INCLUDING WATER USED FOR ROLLERS, DUST CONTROL, AND CLEANUP, SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.

TS-22 CLEAN-UP

THE CONTRACTOR SHALL CLEAN UP THE JOBSITE PRIOR TO ACCEPTANCE OF THE WORK. ALL DIRT, SPOIL, AND DEBRIS OF ANY NATURE SHALL BE REMOVED AND THE ENTIRE SITE SHALL PRESENT A CLEAN, WORKMANLIKE APPEARANCE. ANY DAMAGE TO PAINT WORK, SPILLAGE, OR SPLATTERING FROM PRIME COATING, PAVING OR SEAL COATING OPERATIONS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\CI-07 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019--02:47 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>SPRING VIEW MIDDLE SCHOOL 5040 5TH STREET, ROCKLIN, CA 95677</p> <p>GENERAL NOTES</p>	<p>Sheet C2.3</p>												
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>QUANT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> </table>				QUANT.				DRAWN	PGC	RFE		DESIGN	PGC	RFE		<p>4 of 9</p>
QUANT.																					
DRAWN	PGC	RFE																			
DESIGN	PGC	RFE																			
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK															

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\CI-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019-02:47 pm



LEGEND

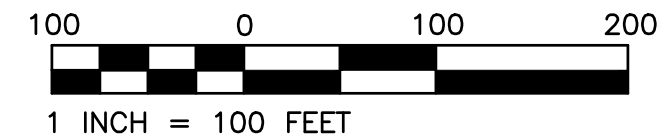
AC PAVEMENT REMOVAL AND REPLACEMENT



NOTES:

1. SEE AC PAVEMENT REPAIR DETAILS ON SHEET C5.
2. SHOWN AREAS ARE APPROXIMATE LOCATIONS.
3. CORNERS OF REPAIR AREAS WERE MARKED ON-SITE WITH WHITE PAINT.

PARKING AND DROP-OFF AREAS					
AREA NO.	DIMENSION	THICKNESS	UNIT	TOTAL AREA	UNIT
1	27' x 28'	4	IN	756	SF
2	13.5' x 30'	4	IN	405	SF
3	28' x 47.5'	4	IN	1,330	SF
4	10' x 17'	4	IN	170	SF
5	13' x 17'	4	IN	221	SF



Know what's below.
Call before you dig.
 or (800) 227-2600

PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES		
					0	1/2	1
NO.	REVISION	DATE	BY	APPR'D	QUANT.	BY	CHECK
					DRAWN	PGC	RFE
					DESIGN	PGC	RFE


RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

SPRING VIEW MIDDLE SCHOOL
 5040 5TH STREET,
 ROCKLIN, CA 95677
AC PAVEMENT REMOVAL AND REPLACEMENT PLAN

Sheet
C3
5 of 9
01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\CI-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019-02:47 pm



LEGEND

CRACK FILL, SEAL COAT, AND RE-STRIPING AS EXISTING

NOTES:

1. SEE CRACK FILL DETAILS ON SHEET C5.
2. SEAL COAT WILL BE DONE IN TWO (2) COATS. SEE DETAIL ON SHEET C5.
3. ALL CURBS WILL BE REPAINTED TO MATCH EXISTING. SEE DETAIL ON SHEET C5.
4. ALL STRIPING AND PAVEMENT MARKINGS WILL BE DONE IN TWO (2) COATS AND WILL BE RE-STRIPED AND RE-PAINTED TO MATCH EXISTING.

PARKING AND DROP-OFF AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	1/4"-1" Wide Rubberized Crack fill	LF	850
2	>1" Wide Crack Fill	LF	200
3	Seal Coat (Two Coats)	SF	52,400
4	Parking Stalls	EA	82
5	ADA Symbol	EA	5
6	Accessible Unloading Area	EA	3
7	Unloading Area Crosshatch	EA	1
8	White Line Striping	LF	190
9	8' x 38' Crosswalk Striping	EA	1
10	Yellow Crosswalk Lane Striping	LF	200
11	Red Curb Painting with "NPFL"	LF	400
12	White Curb Painting	LF	150
13	Yellow Curb Painting	LF	60
PLAYCOURT AREA			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
14	1/4"-1" Wide Rubberized Crack fill	LF	2,000
15	Seal Coat (Two Coats)	SF	52,500
16	Set of Number Stencils	SETS	4
17	Miscellaneous Pavement Markings	LS	1
18	Basketball Court	EA	6



Know what's below.
Call before you dig.
or (800) 227-2600



1 INCH = 100 FEET

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

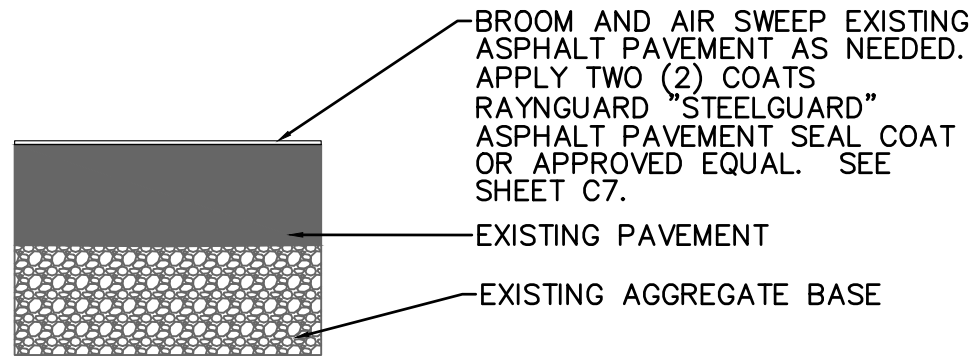
ORIGINAL SCALE IS IN INCHES		
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEEngineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

SPRING VIEW MIDDLE SCHOOL
5040 5TH STREET,
ROCKLIN, CA 95677
CRACK FILL, SEAL COAT, AND STRIPING PLAN

Sheet
C4
6 of 9
01/15/2019

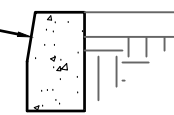


BROOM AND AIR SWEEP EXISTING ASPHALT PAVEMENT AS NEEDED. APPLY TWO (2) COATS RAYNGUARD "STEELGUARD" ASPHALT PAVEMENT SEAL COAT OR APPROVED EQUAL. SEE SHEET C7.

EXISTING PAVEMENT
EXISTING AGGREGATE BASE

POLYMER MODIFIED ASPHALT PAVEMENT SEAL COAT

SANDBLAST AND REMOVE ANY EXISTING LOOSE PAINT PRIOR TO NEW PAINT APPLICATION. PAINT COLOR TO MATCH EXISTING UNLESS OTHERWISE NOTED.



STANDARD CURB

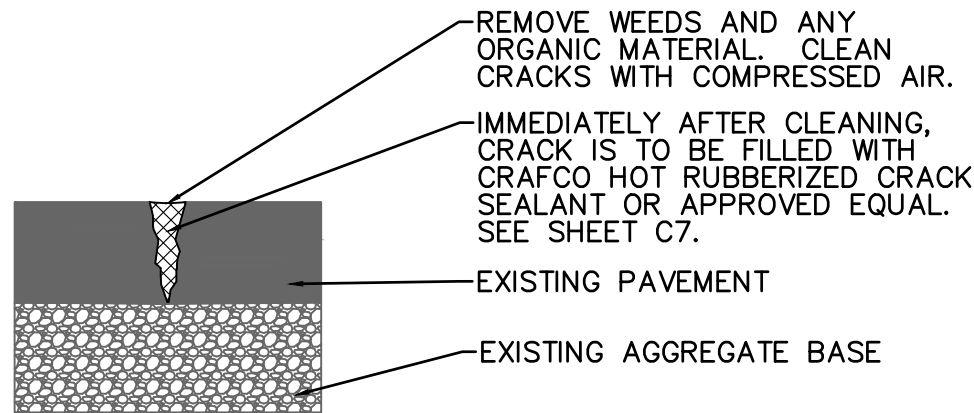


RAISED CURB REPAINTING

CURB MARKINGS AT FIRE LANES

NOTES:

- 1. REPAINT CURBS TO MATCH EXISTING COLOR AND MARKINGS.



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR. IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH CRAFCO HOT RUBBERIZED CRACK SEALANT OR APPROVED EQUAL. SEE SHEET C7.

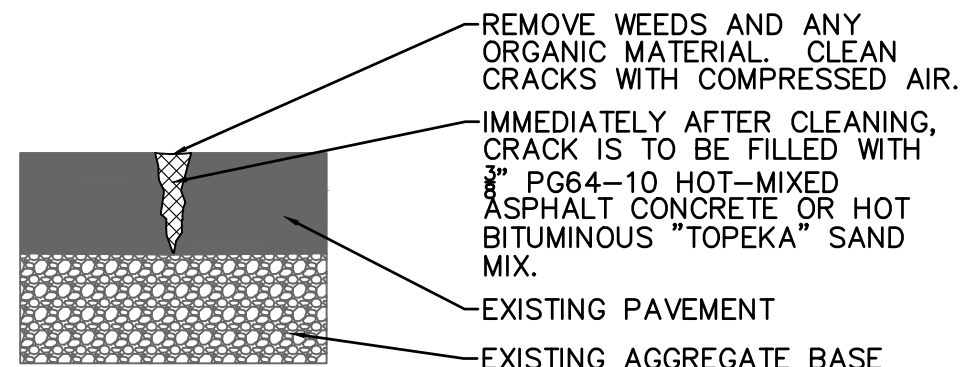
EXISTING PAVEMENT
EXISTING AGGREGATE BASE

CRACK WIDTHS 1/4"-1"

NOTES:

- 1. CRACK WIDTHS LESS THAN 1/4" SHALL NOT BE SEALED.

ASPHALT CRACK SEAL WITH HOT RUBBERIZED SEALANT

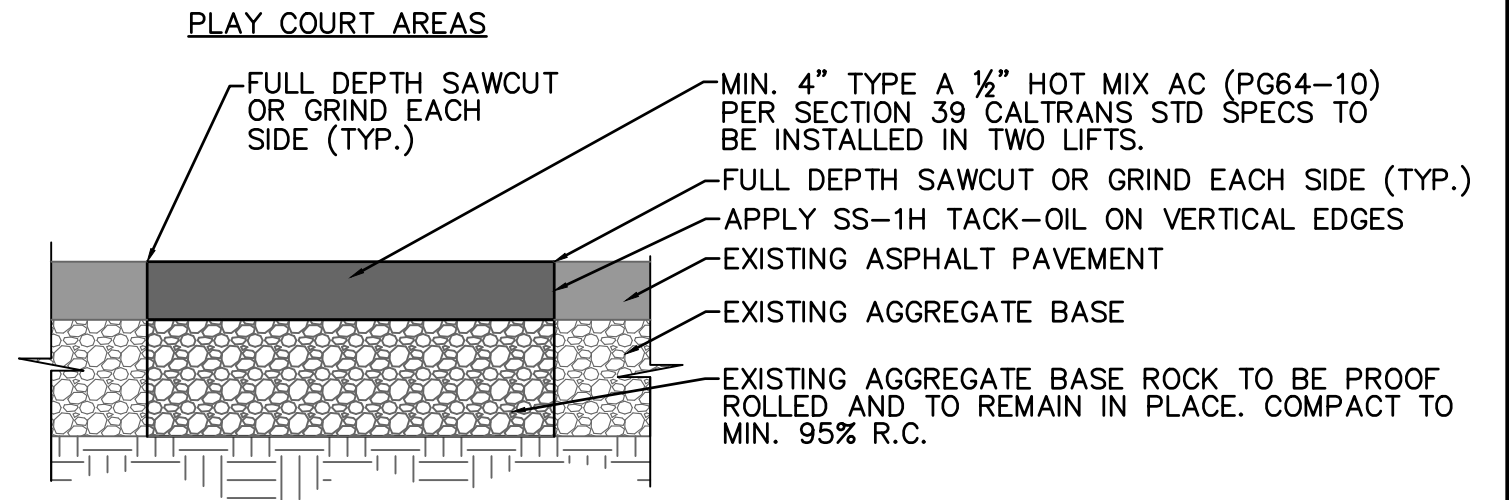


REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR. IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH 3/8" PG64-10 HOT-MIXED ASPHALT CONCRETE OR HOT BITUMINOUS "TOPEKA" SAND MIX.

EXISTING PAVEMENT
EXISTING AGGREGATE BASE

CRACK WIDTHS GREATER THAN 1"

ASPHALT CRACK REPAIR WITH HOT BITUMINOUS SAND MIX



PLAY COURT AREAS

PARKING AND DRIVEWAY AREAS

FULL DEPTH SAWCUT OR GRIND EACH SIDE (TYP.)

MIN. 4" TYPE A 1/2" HOT MIX AC (PG64-10) PER SECTION 39 CALTRANS STD SPECS TO BE INSTALLED IN TWO LIFTS.

FULL DEPTH SAWCUT OR GRIND EACH SIDE (TYP.)

APPLY SS-1H TACK-OIL ON VERTICAL EDGES

EXISTING ASPHALT PAVEMENT

EXISTING AGGREGATE BASE

EXISTING AGGREGATE BASE ROCK TO BE PROOF ROLLED AND TO REMAIN IN PLACE. COMPACT TO MIN. 95% R.C.

ASPHALT PAVEMENT REMOVAL AND REPLACEMENT ON (EXISTING) BASE

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES		
0	1/2	1 1/2
QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

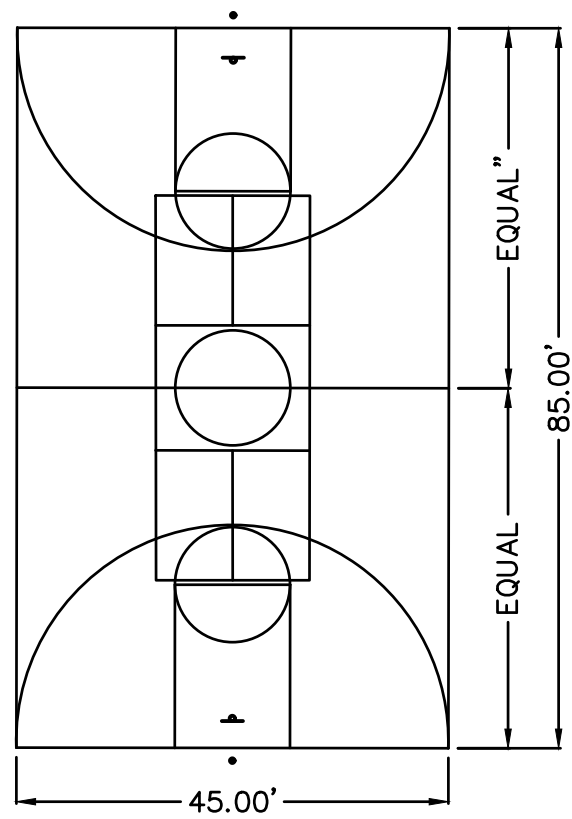
SPRING VIEW MIDDLE SCHOOL
5040 5TH STREET,
ROCKLIN, CA 95677
AC PAVEMENT REPAIR DETAILS

Sheet	C5
	7 of 9
	01/15/2019

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\C1-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019-02:47 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\CI-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019-02:47 .pm



CUSTOM BASKETBALL COURT

NOTES:

1. ALL PLAYCOURT STRIPING WILL BE RE-STRIPED AND RE-PAINTED AS EXISTING.
2. SHOWN DETAILS ARE FOR REFERENCE ONLY. VERIFY ACTUAL DIMENSIONS AND COLORED FINISH ON-SITE.
3. TYPICAL WHITE PAINT LINES ARE 3" WIDE.
4. ALL DIMENSIONS ARE TO INSIDE EDGE OF LINE.

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p> <p>0 1/2 1 1 1/2</p>			 <p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>SPRING VIEW MIDDLE SCHOOL 5040 5TH STREET, ROCKLIN, CA 95677</p> <p>PLAYCOURT STRIPING DETAILS</p>	<p>Sheet</p> <p>C6</p>		
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">QUANT.</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> </tr> <tr> <td>BY</td> <td>CHECK</td> <td></td> </tr> </table>	QUANT.						DRAWN	PGC
QUANT.													
DRAWN	PGC	RFE											
DESIGN	PGC	RFE											
BY	CHECK												
NO.	REVISION	DATE	BY	APPRV'D									



TECHNICAL DATA SHEET
STEELGUARD

A single package, water dispersed polymer modified, slate and mineral filled, black, asphalt coating. The product, following minimal dilution with potable water, may be easily applied by squeegee or spray applied with proper, heavy duty commercial equipment. It is designed to restore minor pavement surface profile loss; and to professionally seal all asphalt surfaces against accelerated deterioration from sun, wind, rain, tire abrasion and mild chemical attack.

Available in 5 and 55 gallon containers; and in bulk.

ADVANTAGES:

- May be applied above 50°F (10°C) and rising on most dry or slightly damp surfaces. (May be applied in cooler temperatures with the use of fast drying additives or under favorable conditions - See "Drying").
- SteelGuard provides excellent coverage with a higher film thickness per coat due to higher aggregate/binder content. Helps fill minor surface (non-working) cracks in the pavement to eliminate water penetration.
- SteelGuard provides excellent adhesion.
- Excellent curing properties under normal conditions. Assists in nighttime installations without direct sun loading. Quick-setting additives are available for more challenging installations.
- Will resist re-emulsification once fully cured. Traffic striping immediately after curing may be achieved without discoloration.
- Resistant to tire scuff and power steering abuse.
- Contains no bio-accumulative metals or chemicals. Non-hazardous in cured form; therefore, may be disposed as cured residue into any municipal land fill.

USES:

- Designed for application as a professional protective coating of asphalt pavements including driveways, playgrounds, parking lots, bike paths, surface streets, highways and airport taxiways and runways.
- Available in modified forms for various color applications, skid resistant requirements or for applications in demanding situations or on alternative surface materials.

APPLICATION:

Apply only onto clean, dry or damp surfaces from which all contaminants have been removed; i.e. built-up crankcase drippings, oil spots, loose traffic paint, etc. Areas upon which a high build-up of grease or loose paint exists shall be scraped, wire brushed and cleaned to eliminate oil residue from the underlying, sound asphaltic substrate. Prior to application it is recommended that these treated areas be further prepared by surface priming with an approved Oil Spot Treatment.

SteelGuard may be modified for special applications with a variety of polymers, adhesion packages, set control additives and select size aggregates for friction/skid promotion. Please contact your supplier for details.

SHIPPING INFORMATION:

CONTAINER SIZE	UNITS PER PALLET	CUBIC FT PER PALLET	WEIGHT PER PALLET	PALLETS PER 48' TRAILER
5 Gallon Pails	32	50	~ 1950	18
55 Gallon Drums	4	58	~ 2500	20

PHYSICAL PROPERTIES:

Water Absorption	< 1%	ASTM D-570
Weight per gallon	10.5 – 11.5 lbs/gallon	ASTM D-1475
Percent Solids	57 - 62	
Wet Track Abrasion	<35 grams / s.f.	ISSA A-105, T-100
VOC	< 10 grams / liter	BAAQMD Vol 3 Lab 22

SteelGuard contains 4.5 pounds of crushed aggregate, or more, per gallon and is supplied in a high viscosity, semi-paste consistency. The formula is balanced to provide suspension of the aggregate particles but stirring or mixing should be done prior to use to assure a balanced mix.

Immediately prior to application a pre-determined, small quantity of potable water shall be slowly mixed into the contents at an equivalent rate of one to five percent by volume (1 – 5% under normal conditions; up to as much as 10% under very hot conditions) of the **SteelGuard**.

Do not over dilute this product as this will terminate the anti-settling qualities of the **SteelGuard** and could possibly diminish the useful qualities of its cured physical properties.

DRYING: **SteelGuard** is one of the fastest curing pavement surfacing materials available. However, all waterborne curing rates are dependent upon evaporation of the water contained within the formula. The combined effects of surface temperature, air temperature, sun load, wind and humidity will determine the atmospheric water removal capabilities at any given moment. The professional installer will gain valuable experience in gauging time-to-cure by observing cure times against spread rates within the range of these five indicators.

Do not apply this product unless sufficient weather conditions exist to assure full cure prior to being subjected to rain, fog or other inclement weather or heavy traffic.

It is recommended that the inexperienced applicator use spread rates of 20 gallons per 1000 square foot, during daylight hours, at surface and air temperatures above 55° F (13°C) and rising with no rain, fog or other inclement weather in the forecast for at least 24 hours.

Immediately after application, clean implements, including hoses, with cool water after application. **SteelGuard** may crosslink & cure if left standing in sun exposed spray hoses.

TRANSPORTATION, STORAGE AND HANDLING:

- DOT: not regulated
- Keep/store out of direct sunlight.
- Do not allow to freeze prior to application.
- Do not mix with any other products.
- Keep containers tightly sealed when not in use.
- Avoid prolonged skin contact.
- Do not take internally. Do not induce vomiting if swallowed - call a physician immediately.
- Store, handle and dispose per MSDS requirements.



PRODUCT DATA SHEET
SUPERFLEX HT
PART NO. 34533

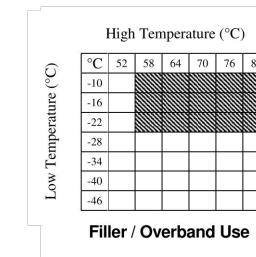
SEPTEMBER 2016

6165 W Detroit St. • Chandler AZ 85226
+1 (602) 276-0406 • +1 (800) 528-8242 • FAX +1 (480) 961-0513
www.crafco.com

READ BEFORE USING THIS PRODUCT

GENERAL Crafco Superflex HT sealant is a hot-applied asphalt based product used to fill cracks in asphalt concrete or Portland cement concrete pavements in moderate to very hot climates. Superflex HT is supplied in solid form which when melted and properly applied forms an adhesive and flexible compound that resists cracking in the winter and is highly resistant to tracking or pick-up by vehicle tires in hot climates. Superflex HT is used in highway, street, airfield and parking lot pavements and is applied to pavement cracks using either pressure feed melter applicators or pour pots. At application temperature, Superflex HT is a low viscosity, self-leveling product which easily penetrates narrow cracks. Superflex HT can be melted in jacketed double type melting units, or in small direct bottom fired types of melters. Both melter types must have sufficient agitation and temperature indicating devices to assure that the material is heated to and maintained within the specified application temperature range of 380° to 400°F (193 to 204°C). VOC = 0 g/l.

USAGE GUIDELINES Superflex HT is applicable for Filler/Overband Use in moderate to very hot climates with high and low pavement temperatures identified in the chart. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBind V 3.1, and sealant or filler use is determined following Crafco Product Selection procedures.



SPECIFICATION CONFORMANCE

Crafco Superflex HT meets the following requirements when heated to the maximum heating temperature in accordance with ASTM D5167:

Tests

Softening Point (ASTM D36)
Flexibility, 1/8" (3.2 mm) specimen, 90° bend, 10 sec., 1" (25mm) mandrel (ASTM D3111 modified)
Cone Penetration (ASTM 5329)
Flow, 140°F (60°C), 5 hr. (ASTM D5329)
Elongation 77°F (25°C) (ASTM D412 die C)
Opening to Traffic Time
Maximum Heating Temperature
Application Temperature Range

Specification Limits

210°F (99°C) min.
Pass at 0°F (-18°C)
45 max.
0 mm.
1000% min.
30 minute max.
400°F (204°C)
380-400°F (193-204°C)

INSTALLATION

The unit weight of Crafco Superflex HT is 9.2 lbs./gal. (1.10 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Superflex Sealants to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of sealant.

PACKAGING

Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x 102 cm) 4-way pallets; can be stored outside, and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.
• **BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
• **PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

WARRANTY

CRAFCO, Inc. warrants that CRAFCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**

©2016, Crafco, Inc., #A1143

POLYMER MODIFIED SEAL COAT

HOT-APPLIED RUBBERIZED CRACK SEALANT

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\13 SPRINGVIEW ELEMENTARY SCHOOL\C1-C7 SPRINGVIEW EXHIBIT.dwg, Jan 15, 2019 - 02:47 PM

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK



ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

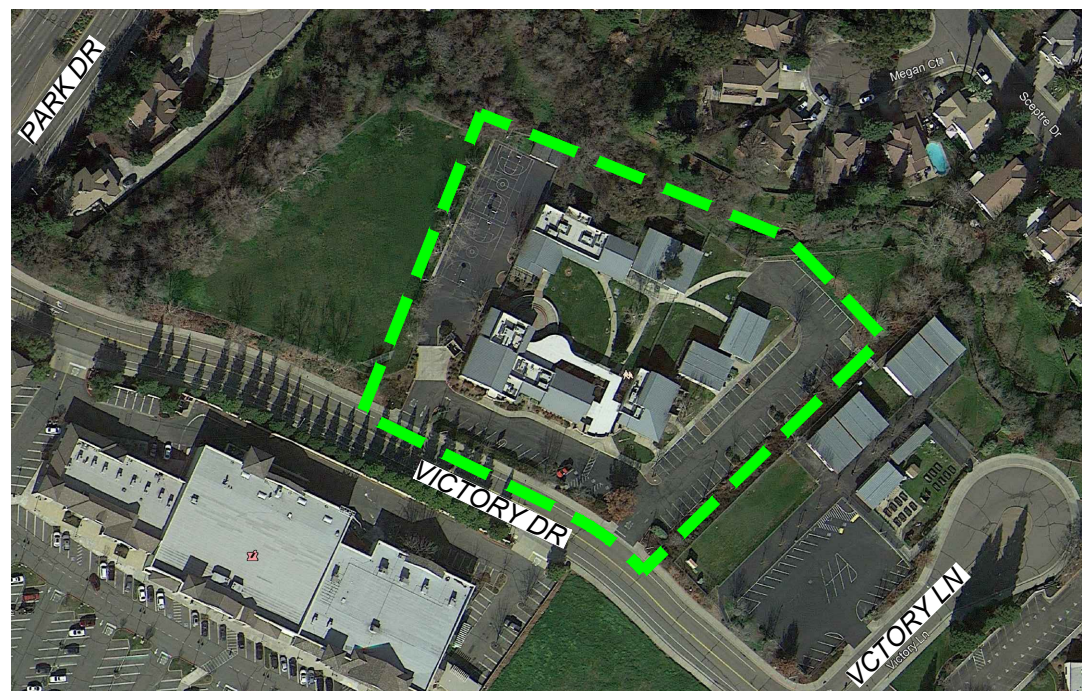
SPRING VIEW MIDDLE SCHOOL
5040 5TH STREET,
ROCKLIN, CA 95677
MATERIAL SPECIFICATONS

Sheet
C7
9 of 9
01/15/2019

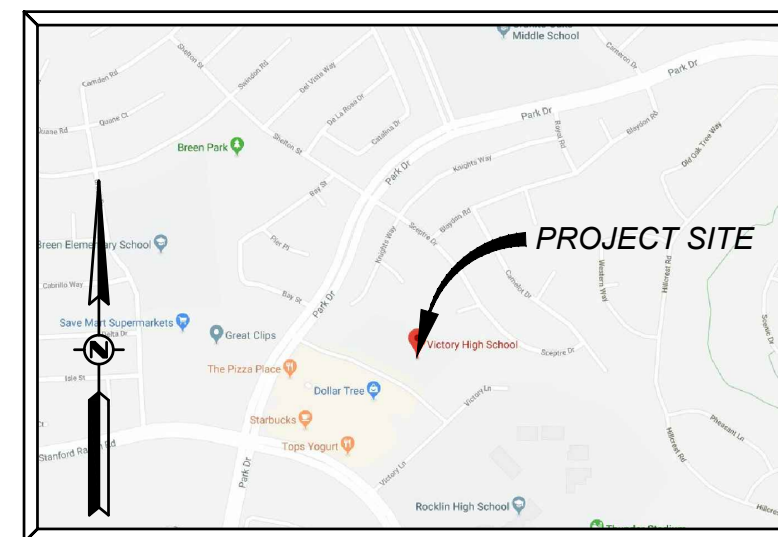
RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

VICTORY HIGH SCHOOL PAVEMENT REHABILITATION PLANS

3250 VICTORY DRIVE,
ROCKLIN, CA 95765



LIMITS OF IMPROVEMENTS
SCALE: 1"=200'



VICINITY MAP
NOT TO SCALE

SHEET INDEX:

- C1 TITLE SHEET
- C2.1-C2.3 GENERAL NOTES
- C3 CRACK FILL, SEAL COAT AND STRIPING PLAN
- C4 AC PAVEMENT REPAIR DETAILS
- C5 PLAYCOURT STRIPING DETAILS
- C6 MATERIAL SPECIFICATIONS

OWNER:

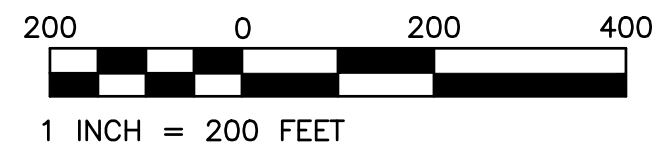
CRAIG ROUSE
ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DRIVE,
ROCKLIN, CA 95677
PH: (916) 630-2246



Know what's below.
Call before you dig.
or (800) 227-2600

NOTICE TO CONTRACTOR :

THIS SET IS BASED ON AERIAL PHOTOGRAPHY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE EXISTING INFORMATION SHOWN ON THESE PLANS IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING SITE CONDITIONS. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR MUST ALSO CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.



**PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION**

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

**ROCKLIN UNIFIED
SCHOOL DISTRICT**
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

VICTORY HIGH SCHOOL
3250 VICTORY DR,
ROCKLIN, CA 95765
TITLE SHEET

Sheet
C1

1 of 8
01/15/2019

TECHNICAL SPECIFICATIONS:

TS-1 THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER.

TS-2 NOTIFICATIONS
IN ORDER TO ALLOW THE OWNER SUFFICIENT TIME TO NOTIFY THE VARIOUS OCCUPANTS OF UPCOMING WORK, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AT LEAST TEN (10) WORKING DAYS BEFORE COMMENCING WORK ON ANY PORTION OF THE WORK.

TS-3 PROTECTION OF EXISTING INSTALLATIONS
THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING INSTALLATIONS FROM DAMAGE RESULTING FROM THE OPERATION OF EQUIPMENT OR PLACEMENT OF MATERIAL. SUITABLE PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXPOSED SURFACES FROM DISCOLORATION RESULTING FROM THE APPLICATION OF ASPHALTIC MATERIALS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, AT NO EXTRA COST TO THE OWNER, TO PROVIDE SUITABLE MEANS OF DUST CONTROL RESULTING FROM HIS PERFORMANCE OF THE WORK. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

TS-4 CONTROL OF MATERIALS
ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED IN A WORKMANLIKE MANNER. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE AREAS OF WORK SHOWN ON THE PLANS.
THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO VERIFY WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER.
INITIAL TESTING DONE TO DETERMINE SPECIFICATION COMPLIANCE WILL BE PERFORMED AND PAID FOR BY THE OWNER. IF ANY PARTICULAR PORTION OF THE WORK DOES NOT PASS THIS TESTING, IT SHALL BE SUBJECT TO A RETEST AFTER THE CONTRACTOR FEELS HE HAS REMEDIED THE DEFICIENCY. ALL RETESTING WILL BE PAID FOR BY THE CONTRACTOR.
IN THE EVENT THAT THE OWNER DOES NOT PROVIDE ON-SITE INSPECTION DURING CONSTRUCTION, THE CONTRACTOR IS HEREBY NOTIFIED THAT TWO OR MORE CORE TESTS WILL BE TAKEN TO CHECK FOR COMPLIANCE TO THESE SPECIFICATIONS. IF DEFICIENCIES IN MATERIAL QUALITY, THICKNESS, OR DENSITIES ARE DETERMINED, THE ENTIRE AREA REPRESENTED BY THAT TEST SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. IN ADDITION, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ADDITIONAL TESTING TO DETERMINE COMPLIANCE OF ALL OTHER AREAS TESTED. ALL NON-COMPLYING AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

TS-5 WORK SCHEDULE AND PUBLIC SAFETY
FIVE (5) DAYS PRIOR TO INITIATING THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE OF WORK TO THE ENGINEER FOR HIS REVIEW. THE PLAN SHALL CLEARLY INDICATE HOW THE WORK IS TO BE LAID OUT AND THE ORDER IN WHICH INDIVIDUAL AREAS WILL BE COMPLETED. THE GOAL OF THIS REQUIREMENT IS TO ENSURE THAT PUBLIC TRAFFIC IS SAFELY MAINTAINED AND THAT THERE IS ADEQUATE PUBLIC ACCESS TO THE SITE.
CONTRACTOR IS RESPONSIBLE FOR BARRICADING OR TAPING OFF THE WORK TO BE COMPLETED EARLY ENOUGH IN ADVANCE TO ASSURE NO VEHICLES OR OTHER OBSTACLES ARE LEFT IN THE WAY OF CONSTRUCTION.

TS-6 TRAFFIC CONTROL
CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL NECESSARY TO MAINTAIN PUBLIC SAFETY AND ACCESS TO THE PROJECT SITE. PREAPPROVAL BY THE ENGINEER IS REQUIRED BEFORE IMPOSING ANY TRAFFIC CLOSURES. TRAFFIC CONTROL MAY INVOLVE FLAGMEN, GUARDS, BARRICADES, SIGNS, LIGHTS, FLARES, RADIOS, AND OTHER FACILITIES.
THE CONTRACTOR SHALL INCLUDE TRAFFIC CLOSURES IN THE PROPOSED WORK SCHEDULE SUBMITTAL AS DESCRIBED IN SECTION TS-5, "WORK SCHEDULE, AND PUBLIC SAFETY."

TS-7 DUST CONTROL
THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.

TS-8 BEFORE EXECUTION OF ANY WORK, THE CONTRACTOR SHALL EXAMINE ACTUAL JOB CONDITIONS AND REPORT TO RFE ENGINEERING, INC. ANY ERROR, OMISSION, OR DISCREPANCY AFFECTING WORK. UPON COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO RFE ENGINEERING, INC. IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER OR CITY ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. ANY COST INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TS-9 THE CONTRACTOR SHALL KEEP A SET OF PROJECT DRAWINGS ON WHICH RECORD INFORMATION SHALL BE PLACED NOTING DEVIATIONS FROM THE PLANS IN THE LOCATION, GRADE, SIZE, TYPE, AND SCOPE OF WORK THAT IS CONSTRUCTED.

TS-10 THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER "AS BUILT" DRAWINGS AT PROJECT COMPLETION. THE CONTRACTOR SHALL PROVIDE ONE COMPLETE ACCURATE SET OF RECORD CHANGES. THE CHANGES SHALL BE PLACED ON A CLEAN SET OF PROJECT DRAWINGS IN RED, AND GIVEN TO THE ENGINEER AT JOB COMPLETION.

TS-11 THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE QUANTITIES FOR BID AND FIELD INSTALLATION.

TS-12 THESE DRAWINGS ARE FOR THIS SPECIFIC PROJECT AND NO OTHER USE IS AUTHORIZED. RFE ENGINEERING, INC. DISCLAIMS ALL RESPONSIBILITY FOR CONSTRUCTION BEYOND WHAT IS SPECIFICALLY DESIGNED OR DETAILED HEREIN.

TS-13 EROSION CONTROL NOTES
EROSION AND SEDIMENTATION CONTROL PROGRAM: THE LOCATION OF EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THESE PLANS MAY VARY ACCORDING TO THE SEASON AND PHASE OF CONSTRUCTION. THE OBJECTIVE OF THESE MEASURES IS TO MITIGATE THE EROSION AND SEDIMENTATION IMPACTS.

MAINTENANCE PROGRAM: THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE EROSION AND SEDIMENTATION MITIGATION MEASURES ON ALL DISTURBED AREAS BEFORE, DURING, AND AFTER STORMS. THE CONTRACTOR SHALL ENSURE THAT THE EROSION AND SEDIMENTATION MEASURES ARE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS.

INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. WINTERIZATION AND EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

TS-14 DEMOLITION PLAN NOTES
SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT WITHIN THE LIMITS OF DEMOLITION. ENGINEER SHALL VERIFY LIMITS OF DEMOLITION. PROTECT EXISTING PAVEMENT THAT WILL REMAIN.

THE DISPOSAL OF ALL DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS. ANY PERMITS REQUIRED FOR SUCH DISPOSAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.

EXISTING MATERIALS (I.E. IRRIGATION, ELECTRICAL) TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.

TS-15 FULL-DEPTH AC PAVEMENT REPAIR OR RECONSTRUCTION

GENERAL
AREAS DESIGNATED BY THE ENGINEER SHALL BE DUG OUT TO A DEPTH AS SHOWN ON THE PLANS, REMOVED AND REPLACED WITH THE SAME THICKNESS OF AC, UNLESS OTHERWISE DIRECTED ON THE CONTRACT PLANS. THE AC SHALL BE PLACED IN TWO (2) EQUAL LIFTS. THE FINAL LIFT MUST BE 1.5 INCHES THICK OR GREATER. **THE COMMON PRACTICE OF CAPPING DIGOUTS WITH A THIN LIFT OF ASPHALT IS NOT ACCEPTABLE.**

MATERIALS
THE ASPHALT CONCRETE USED FOR THIS WORK SHALL CONFORM TO ALL REQUIREMENTS OF **SECTION TS-17**, "ASPHALT CONCRETE," OF THESE TECHNICAL SPECIFICATIONS.
TACK COAT EMULSION SHALL BE SS-1H.

CONSTRUCTION
THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR DISPOSAL OF EXCAVATED MATERIALS.
ALL EDGES SHALL BE SAW-CUT OR MILLED. IF A MILLING MACHINE IS USED, ALL SLOPING EDGES SHALL BE CHIPPED TO A VERTICAL FACE. EXPOSED EDGES SHALL BE PROTECTED AGAINST BREAKAGE WITH TIMBERS OR AC MIX WHENEVER A ROLLER ENTERS OR LEAVES THE REPAIR SPOT.

THE UNDERLYING MATERIAL TO REMAIN IN PLACE SHALL BE RECOMPACTED TO 95 PERCENT MINIMUM RELATIVE COMPACTION AS DETERMINED BY AASHTO TESTS T180 AND T238 TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE REPAIR. AFTER COMPACTION AND PRIOR TO THE PLACING OF ASPHALT CONCRETE, THE VERTICAL EDGES OF THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT.
WHENEVER THE SURFACE COURSE OF AC IS PLACED MORE THAN FOUR HOURS AFTER THE BASE COURSE OR, IN THE OPINION OF THE ENGINEER, CONTAMINATION BY DIRT OR DUST HAS CAUSED THE BASE COURSE TO LOSE ITS TACKINESS, A TACK COAT SHALL BE APPLIED TO THE ENTIRE AREA OF THE REPAIR BEFORE PLACING THE SURFACE COURSE. TACK COAT SHALL BE APPLIED AT A RATE EQUIVALENT TO 0.05 TO 0.15 GALLONS PER SQUARE YARD.
THE FINISHED REPAIR SHALL CONFORM TO THE SURROUNDING GRADE AND CONTOUR AND SHALL NOT TRAP WATER OR PRESENT A VISIBLE HUMP.

ASPHALT CONCRETE SHALL BE COMPACTED TO A MINIMUM 93 PERCENT OF MAXIMUM THEORETICAL DENSITY (DENSITY WITH ZERO AIR VOIDS) AS DETERMINED BY AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) D-2041.

UNSUITABLE MATERIAL
IN THE EVENT THAT THE UNDERLYING MATERIAL IS UNSUITABLE, IT SHALL BE EXCAVATED BELOW THE DEPTH REQUIRED ABOVE AND DISPOSED OF IN ACCORDANCE WITH THESE SPECIAL PROVISIONS. THE LIMITS OF REMOVAL SHALL BE DESIGNATED BY THE ENGINEER. THE RESULTING SPACE SHALL BE FILLED WITH A SINGLE LIFT OF ASPHALT CONCRETE.

UNSUITABLE MATERIAL IS DEFINED AS MATERIAL THE ENGINEER DETERMINES TO BE:

- a. OF SUCH UNSTABLE NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS AT OPTIMUM MOISTURE CONTENT; OR
- b. TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE IN-PLACE DRYING PRIOR TO INCORPORATION INTO THE WORK; OR
- c. OTHERWISE UNSUITABLE FOR THE PLANNED USE.

TS-16 TACK COAT
AN ASPHALT EMULSION TACK COAT SHALL BE APPLIED TO ALL VERTICAL SURFACES OF EXISTING PAVEMENT, CURBS, GUTTERS, AND CONSTRUCTION JOINTS, AGAINST WHICH ADDITIONAL MATERIAL IS TO BE PLACED.
ADDITIONALLY, WHEN PLACING AN OVERLAY WITHOUT FABRIC, THE TOP LIFT OF A FULL-DEPTH AC REPAIR, OR AC LEVELING, PAVING SHALL BE PRECEDED BY A TACK COAT OVER THE ENTIRE SURFACE UNLESS THE EXISTING SURFACE HAS BEEN PLACED WITHIN THE LAST FOUR HOURS AND, IN THE OPINION OF THE ENGINEER, IS CLEAN ENOUGH TO BOND WITHOUT THE NEED FOR A TACK COAT.
THE TACK COAT SHALL BE SS-1H, MEETING THE REQUIREMENTS OF SECTION 94 OF THE STATE STANDARD SPECIFICATIONS. FULL COMPENSATION FOR FURNISHING AND APPLYING ASPHALT EMULSION TACK COAT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEMS INVOLVING ASPHALT CONCRETE.



ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

VICTORY HIGH SCHOOL
3250 VICTORY DR,
ROCKLIN, CA 95765
GENERAL NOTES

Sheet
C2.1
2 of 8
01/15/2019

PRELIMINARY PLAN				
DRAFT - NOT FOR CONSTRUCTION				
NO.	REVISION	DATE	BY	APPRV'D

QUANT.			
DRAWN	PGC	RFE	
DESIGN	PGC	RFE	
	BY	CHECK	

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\10 VICTORY HIGH SCHOOL\CI-06 VICTORY HS EXHIBIT.dwg, Jan 15, 2019 - 02:04 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

TS-17 ASPHALT CONCRETE

GENERAL

THE FOLLOWING PROVISIONS FOR ASPHALT CONCRETE MATERIAL SHALL APPLY TO WORK COMPLETED WITHIN THESE SPECIFICATIONS.

MATERIALS

ASPHALT CONCRETE SHALL COMPLY WITH THE PROVISIONS OF SECTION 39 OF THE CALIFORNIA STATE STANDARD SPECIFICATIONS AND AS MODIFIED HEREWITH. THE REQUIREMENTS PROVIDED WITHIN THESE SPECIAL PROVISIONS SHALL SUPERSEDE STATE SPECIFICATIONS WHERE CONFLICTS OR OTHER DISPARITIES EXIST. THE USE OF AGGREGATE SOURCE STEMMING FROM BEAR RIVER OR ANY SIMILAR SOURCE OF AGGREGATE THAT IS KNOWN TO CONTAIN A SIGNIFICANT AMOUNT OF QUARTZITE MATERIAL IS NOT TO BE USED IN PRODUCTION OF ASPHALT CONCRETE MATERIALS FOR THIS PROJECT.

ASPHALT CONCRETE SHALL BE HOT PLANT MIXED AND SHALL BE FURNISHED FROM THE PLANT AT A TEMPERATURE NOT TO EXCEED 325 DEGREES F.

ASPHALT CONCRETE FOR PAVING WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A PG 64-10 VISCOSITY GRADED, STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.

ASPHALT CONCRETE FOR PAVEMENT REPAIR WORK SHALL BE **TYPE A, 1/2 INCH MAXIMUM MEDIUM GRADATION**, CONFORMING TO THE REQUIREMENTS OF SECTION 39-2 OF THE STATE STANDARD SPECIFICATIONS. ASPHALT BINDER SHALL BE A **PG 64-10 VISCOSITY GRADED; STEAM REFINED PAVING ASPHALT CONFORMING TO SECTION 92 OF THE STATE STANDARD SPECIFICATIONS.**

THE ACTUAL ASPHALT CEMENT CONTENT MAY VARY UP TO 0.3% PLUS/MINUS FROM THE TARGET OPTIMUM BITUMEN CONTENT (OBC) UNLESS THE JOB-MIX-DESIGN AND FINAL PRODUCT INDICATE THE REQUIRED PROVISIONS ARE NOT MET.

NOTE: AT THE OBC, THE COMPACTED MIXTURE SHALL HAVE THE FOLLOWING PROPERTIES:

HVEEM STABILITY 35 MIN. TYPE B
37 MIN. TYPE A

THE SUGGESTED JOB-MIX-DESIGN AIR VOIDS BELOW ARE PROVIDED TO HELP OBTAIN COMPACTION REQUIREMENTS IN THE FIELD AND ARE NOT A SPECIFICATION REQUIREMENT.

AIR VOIDS 3% TO 5%

ONLY MATERIALS CONFORMING TO THE SPECIFICATIONS SHALL BE INCORPORATED IN THE WORK. THE MATERIALS SHALL BE MANUFACTURED, HANDLED, AND USED TO INDUSTRY STANDARDS.

SUBMITTALS

THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER FOR REVIEW AND APPROVAL, AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, A LIST OF HIS SOURCES OF MATERIALS TOGETHER WITH A CERTIFICATE OF COMPLIANCE, INDICATING THAT MATERIALS TO BE INCORPORATED IN THE WORK FULFILL THE REQUIREMENTS OF THESE SPECIFICATIONS AND THE JOB-MIX-DESIGN FOR THE ASPHALT CONCRETE. THE CERTIFICATE OF COMPLIANCE SHALL BE SIGNED BY THE MATERIAL SUPPLIER OR HIS REPRESENTATIVE. IT IS THE INTENT OF THESE SPECIFICATIONS THAT MATERIALS TO BE INCORPORATED IN THE WORK MEET THE REQUIREMENTS OF THESE SPECIFICATIONS AFTER INCORPORATION IN THE PAVED AREAS SHOWN ON THE PLANS.

AT LEAST TEN (10) WORKING DAYS PRIOR TO START OF WORK, THE CONTRACTOR SHALL ALSO FURNISH A **JOB-MIX-DESIGN** FOR THE ASPHALT CONCRETE. THE JOB-MIX-DESIGN SHALL INDICATE ALL OF THE FOLLOWING:

1. PERCENTAGE PASSING EACH SIEVE SIZE
2. PERCENT ASPHALT RECOMMENDED
3. PERCENT VOIDS*
4. STABILITY*
5. MAXIMUM THEORETICAL UNIT WEIGHT*

THE * ITEMS SHALL BE PROVIDED AT EACH ASPHALT CONTENT USED TO ARRIVE AT THE RECOMMENDED OPTIMUM BITUMEN CONTENT.

THE JOB-MIX-DESIGN SHALL BE IN EFFECT UNTIL A CHANGE IS APPROVED IN WRITING BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED JOB-MIX-DESIGN. RECENT MIX DESIGNS FROM PREVIOUS JOBS USING THE SAME MIXTURE MAY BE SUBMITTED FOR APPROVAL. MIX DESIGN IN EXCESS OF 6 MONTHS IN AGE MUST BE SUBMITTED WITH RECENT GRADATIONS FOR VERIFICATION.

TESTING

THE OWNER'S ENGINEER SHALL HAVE THE RIGHT TO OBTAIN SAMPLES OF ALL MATERIALS TO BE USED IN THE WORK AND TO TEST SUCH SAMPLES FOR THE PURPOSE OF DETERMINING SPECIFICATIONS COMPLIANCE. THE OWNER RESERVES THE RIGHT TO OBTAIN SAID SAMPLES AT THE POINT OF DELIVERY AND/OR AT THE POINT OF MANUFACTURE. THE OWNER SHALL ALSO HAVE THE RIGHT TO INSPECT SOURCES OF MATERIALS TO BE USED IN THE WORK TO DETERMINE WORKMANLIKE PROCEDURES USED BY THE MATERIALS SUPPLIER. ANY MATERIAL TESTING COMPLETED OR NOT COMPLETED BY THE OWNER DOES NOT RELIEVE THE CONTRACTOR OF COMPLYING WITH THE PROVISIONS HEREIN.

TS-18 ADJUST UTILITY COVERS

STORM DRAIN AND SEWER MANHOLE COVERS, CLEANOUTS, WATER VALVE COVERS, UTILITY VAULT AND OTHER SUCH UTILITY ACCESS COVERS, WITHIN AREAS TO BE PAVED WITH ASPHALT CONCRETE SHALL BE ADJUSTED BY THE CONTRACTOR TO THE NEW FINISHED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE NUMBER OF UTILITY COVERS TO BE ADJUSTED, ACCURATELY REFERENCING ALL COVERS PRIOR TO PAVING AND ADJUSTING THE COVERS AFTER PAVING HAS BEEN COMPLETED.

CUTTING OF THE NEW PAVEMENTS TO MAKE UTILITY COVER ADJUSTMENTS SHALL BE ACCOMPLISHED WITHOUT DISTURBING OR DEFORMING ASPHALT CONCRETE THAT IS TO REMAIN. DEFORMED ASPHALT CONCRETE SHALL BE REMOVED AND REPAIRED AS DIRECTED BY THE ENGINEER.

UNLESS OTHERWISE SPECIFIED BY THE UTILITY OWNER, COVER FRAMES ARE TO BE SET TO GRADE AND BACKFILLED TO WITHIN 1 1/2 INCHES OF THE FINISHED SURFACE WITH PORTLAND CEMENT CONCRETE. ASPHALT CONCRETE CONFORMING TO THE PROVISIONS IN SECTION TS-11 OF THESE TECHNICAL SPECIFICATIONS SHALL BE USED TO COMPLETE THE RESTORATION TO THE NEW FINISHED SURFACE. SURFACE TOLERANCES AS SPECIFIED FOR ASPHALT CONCRETE OVERLAY SHALL APPLY TO THE RESTORATION OF PAVING SURFACES, INCLUDING THE POSITIONING OF UTILITY COVERS AND FRAMES.

TS-19 SURFACE SEAL COAT (TWO COATS)

GENERAL

THIS WORK SHALL CONSIST OF PREPARING THE SURFACE OF EXISTING ASPHALT CONCRETE PAVEMENT AND APPLYING A SEAL COAT COMPOSED OF A PETROLEUM ASPHALT EMULSION, LATEX POLYMER, AND MINERAL AGGREGATE. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS FOR DOING ALL OF THE WORK NECESSARY TO SEAL COAT THE AREAS DESIGNATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED MUST BE ERADICATED PRIOR TO THE SEAL COAT APPLICATION.

MATERIALS

THE ASPHALT EMULSION SEAL COAT MATERIAL TO BE FURNISHED AND APPLIED BY THE CONTRACTOR SHALL BE **RAYNGUARD "STEELGUARD" PAVEMENT SEALER**, OR APPROVED EQUAL. **NOTE: COAL TAR EMULSION AND GILSONITE PRODUCTS ARE NOT ACCEPTABLE.**

SEAL COAT MATERIAL DELIVERED FOR USE ON THE WORK SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

1. RESIDUE AT 300 - 400 DEGREES F., % 60 - 70
2. DEHYDRATION, 96 HOURS AT 100 DEGREES F. 0.6 MIN
3. SOLUBILITY OF RESIDUE IN C2HCL 15 - 20
4. LOSS ON IGNITION OF INSOLUBLE RESIDUE % 16 MAX
5. CONE PENETRATION AT 77 DEGREES F., DMM 400 - 700

MIX DESIGN COMPOSITION:

FIRST APPLICATION

100 GALLONS SEAL COAT MATERIAL
300 POUNDS SILICA SAND (30 MESH) (IF NOT INCLUDED IN SEAL MATERIAL)
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF PORTABLE WATER FOR DILUTION

SECOND APPLICATION

100 GALLONS SEAL COAT MATERIAL
2 GALLONS LATEX COPOLYMERS (IF NOT INCLUDED IN SEAL MATERIAL)
APPROPRIATE GALLONS OF POTABLE WATER FOR DILUTION

DILUTION OF SEAL MATERIAL WITH WATER FOR EASE OF APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ANY WATER ADDITION SHALL BE CAREFULLY MEASURED INTO A KNOWN VOLUME OF SEAL MATERIAL. AGGREGATE SHALL BE EITHER NATURAL OR MANUFACTURED PRODUCT COMPOSED OF CLEAN, HARD, DURABLE PARTICLES FREE FROM DIRT, ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A CERTIFICATE FROM THE SUPPLIER OF THE SEAL COAT MATERIAL GIVING THE TRADE NAME OF THE SEALER AND VERIFICATION THAT THE SEALER CONFORMS TO THESE SPECIFICATIONS.

APPLICATION

THE SURFACE TO BE SEALED SHALL BE CLEANED TO REMOVE ALL ORGANIC MATERIALS, SAND, DUST, AND CLAY. PRIOR TO PLACING THE SEAL, CRACKS SHALL BE FILLED, AND ALL AREAS CAPABLE OF PONDING WATER GREATER THAN 3/8 INCH IN DEPTH SHALL BE PRE-LEVELLED AS NECESSARY TO ELIMINATE THE POSSIBILITY OF STANDING WATER.

BEFORE PLACING THE SEAL, ALL AREAS OF WATER DAMAGED (RAVELED) PAVEMENT IN EXCESS OF 1/8 INCH REMOVED ASPHALT CONCRETE SHALL RECEIVE ONE PRECOAT OF UNDILUTED EMULSIFIED ASPHALT SEAL MATERIAL WITH 5 POUNDS OF SAND PER GALLON OF SEAL. THE PRECOAT SHALL FILL THE RAVELED PAVEMENT AND PROVIDE A SMOOTH, NEAT SURFACE PRIOR TO PLACEMENT OF THE TWO COATS OF DILUTED SEAL MATERIAL.

ACCUMULATIONS OF OIL AND GREASE THAT MAY ADVERSELY AFFECT SEAL COAT BONDING SHALL BE REMOVED BY GRINDING, SCRAPING, OR SCRUBBING WITH TRISODIUM PHOSPHATE OR AN EQUALLY EFFECTIVE INDUSTRIAL DETERGENT. PAVEMENT AREAS REDUCED BY GRINDING SHALL RECEIVE A TACK COAT AND SKIN PATCH OF 1/4 INCH AC MIX. PAVEMENT AREAS CLEANED WITH DETERGENT SHALL BE THOROUGHLY RINSED WITH WATER AND ALLOWED TO DRY. PRIOR TO SEAL COATING, THE CLEANED AREAS SHALL BE TREATED WITH A PROPRIETARY OIL STAIN PRE-TREATMENT OR A 1:1 SOLUTION OF ISOPROPYL ALCOHOL AND SHELLAC.

SEAL SHALL NOT BE APPLIED TO A WET SURFACE NOR WHEN RAIN OR FREEZING WEATHER IS EXPECTED WITHIN 24 HOURS. AIR AND PAVEMENT TEMPERATURE AT TIME OF APPLICATION SHALL BE BETWEEN 60 AND 95 DEGREES F. AND NO SEAL COAT SHALL BE APPLIED WHEN THE AIR TEMPERATURE IS 60 DEGREES F OR LESS. ALSO, OTHER CONDITIONS ARE AS FOLLOWS:

MINIMUM FOUR (4) HOURS OF SUNSHINE EXPECTED IN NEXT TEN (10) HOURS, RELATIVE HUMIDITY BELOW 50% AND WIND SPEED MINIMUM OF FIVE (5) MILES PER HOUR.

THE CONTRACTOR MAY, BASED ON HIS OWN EXPERIENCE, APPLY SEAL COAT DURING FAVORABLE DRYING CONDITIONS WHEN ONE MAJOR POSITIVE FACTOR IN DRYING SUCH AS SUNSHINE, SURFACE TEMPERATURE, HIGH AIR TEMPERATURE, OR LOW HUMIDITY COMPENSATE FOR OTHER NEGATIVE FACTORS. PRIOR TO PLACING THE FIRST COAT OF SEAL COAT IN EXCEPTIONALLY HOT WEATHER, THE SURFACE SHALL BE DAMPENED WITH WATER. ALL EXCESS WATER SHALL BE REMOVED TO LEAVE THE SURFACE ONLY SLIGHTLY DAMP.

Z:\2018 Projects\18113 - Rocklin Schools - Pavement Evaluation\WORKING - CAD\10 - VICTORY - HIGH SCHOOL\CI-06 - VICTORY - HS - EXHIBIT.dwg - Jan. 18, 2019 - 08:54 - am

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p>	<p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>VICTORY HIGH SCHOOL 3250 VICTORY DR, ROCKLIN, CA 95765</p>	<p>Sheet C2.2</p>												
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>QUANT.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> <td></td> </tr> </table>			QUANT.				DRAWN	PGC	RFE		DESIGN	PGC	RFE		<p>GENERAL NOTES</p>	<p>3 of 8</p>
QUANT.																					
DRAWN	PGC	RFE																			
DESIGN	PGC	RFE																			
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>NO.</td> <td>REVISION</td> <td>DATE</td> <td>BY</td> <td>APPRV'D</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	REVISION	DATE	BY	APPRV'D						<p>01/15/2019</p>					
NO.	REVISION	DATE	BY	APPRV'D																	
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>BY</td> <td>CHECK</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	BY	CHECK			<p>01/15/2019</p>											
BY	CHECK																				

TS-20 EMULSIFIED ASPHALT CRACK SEAL

GENERAL

THIS WORK APPLIES TO ALL CRACKS AND JOINTS IN AND ADJACENT TO THE ASPHALT CONCRETE PAVEMENT AS INDICATED ON THE PLANS. FOR CRACKS AND JOINTS 1/4 INCH AND WIDER, THE WORK CONSISTS OF CLEANING, STERILIZING WHERE WEEDS ARE PRESENT, FILLING WITH EMULSIFIED ASPHALT CRACK SEAL AND COVERING WITH SAND. FOR CRACKS AND JOINTS LESS THAN 1/4 INCH WIDE, THE WORK CONSISTS ONLY OF WEED CLEANING AND STERILIZATION.

NO ROUTING OF PAVEMENT IS REQUIRED FOR THIS PROJECT.

MATERIALS

CRACK SEAL SHALL BE AN EMULSIFIED MATERIAL THAT CAN BE READILY HANDLED AT AMBIENT TEMPERATURES, CAN BE STORED FOR PERIODS OF UP TO SIX MONTHS, AND IS MADE WITH BASE MATERIALS THAT WILL REMAIN DUCTILE WITH AGING AND PROVIDE RESILIENCY UNDER EXTREME CLIMATIC CONDITIONS.

THE SEALANT SHALL CONTAIN NO VOLATILE ORGANIC COMPOUNDS WHICH CONTRIBUTE TO AIR POLLUTION AND SHALL CONFORM TO THE REQUIREMENTS IN THE FOLLOWING TABLE:

PROPERTY	TEST METHOD	REQUIREMENTS
VISCOSITY @ 77 F (25 C), SFS	ASTM D-244-76	25-150
PUMPING STABILITY	GB METHOD (1)	PASS
5-DAY SETTLEMENT TEST, PERCENT	ASTM D-244-76	5.0 MAXIMUM
CEMENT MIXING TEST, PERCENT	ASTM D-244-76	2.0 MAXIMUM
SIEVE TEST, PERCENT	ASTM D-244-76	0.1 MAXIMUM
PARTICLE CHARGE TEST	ASTM D-244-76	POSITIVE
RESIDUE, PERCENT	ASTM D-244-76 (MOD) (3)	62 MINIMUM
TEST OF RESIDUE	ASTM D-244-76	
VISCOSITY AT 140 F (60 C), CS.	ASTM D-244-76	1000-4000

NOTES:

- PUMPING STABILITY IS DETERMINED BY CHARGING 450 ML. OF EMULSION INTO A ONE-LITER BEAKER AND CIRCULATING EMULSION THROUGH A GEAR PUMP (ROPER 29 B22621) HAVING 1/4 INCH INLET AND OUTLET. THE EMULSION PASSES IF THERE IS NO SIGNIFICANT OIL SEPARATION AFTER CIRCULATING TEN MINUTES.
- TEST PROCEDURE IDENTICAL WITH ASTM D-244 EXCEPT THAT DISTILLED WATER SHALL BE USED IN PLACE OF TWO PERCENT SODIUM OLEATE SOLUTION.
- ASTM D-244 EVAPORATION TEST FOR PERCENT OF RESIDUE IS MODIFIED BY HEATING A 50 GRAM SAMPLE TO 300 F (149 C) UNTIL FOAMING CEASES, THEN COOLING IMMEDIATELY AND CALCULATING RESULTS.

THE VENDOR SHALL FURNISH CERTIFICATION THAT THE CRACK SEALANT MATERIAL COMPLIES WITH THE ABOVE REQUIREMENTS. SAND COVER SHALL BE FREE FROM CLAY OR ORGANIC MATERIAL AND SHALL BE OF SUCH SIZE THAT FROM 90 PERCENT TO 100 PERCENT WILL PASS A NO. 4 SIEVE AND NOT MORE THAN 10 PERCENT WILL PASS A NO. 200 SIEVE.

APPLICATION

IMMEDIATELY BEFORE APPLYING THE SEALANT, CRACKS AND JOINTS SHALL BE CLEANED BY MECHANICAL OR HAND METHODS FOLLOWED BY BLAST CLEANING WITH HIGH-PRESSURE AIR JETS TO REMOVE ALL RESIDUE AND FOREIGN MATERIAL TO A MINIMUM DEPTH OF THREE-QUARTER (3/4) INCH. WATER JETS SHALL NOT BE ALLOWED. CRACK SURFACES SHALL BE SURFACE DRY AT THE TIME THE SEALANT IS APPLIED.

CRACK SEALANT MATERIAL MAY BE SPREAD WITH ANY TYPE NOZZLE OR DEVICE THAT WILL PLACE THE MATERIAL WITHIN THE SPECIFIED TEMPERATURE RANGE AND TO THE DIMENSIONS SHOWN ON THE PLANS AND IS APPROVED FOR USE BY THE ENGINEER.

CRACK SEALANT SHALL BE PLACED AT A TEMPERATURE SUCH THAT THE SEALANT TEMPERATURE PLUS AIR TEMPERATURE FALLS WITHIN A RANGE OF 150 TO 200 DEGREES FAHRENHEIT.

WHEN CURED, CRACK SEALANT SHALL BE AT LEAST FLUSH WITH THE PAVEMENT SURFACE OR EXTEND NO MORE THAN ONE-EIGHTH (1/8) INCH ABOVE THE PAVEMENT SURFACE. **NOTE: THE COMMON PRACTICE OF "BAND-AIDING" A THICK RIBBON OF CRACK SEALANT TO THE PAVEMENT SURFACE IS NOT ACCEPTABLE.**

CRACKS SHALL BE COVERED WITH CLEAN SAND IMMEDIATELY FOLLOWING PLACEMENT OF THE SEALANT MATERIAL TO PREVENT TRACKING OF SEALANT BY VEHICLES OR PEDESTRIANS.

A LIGHT BROOMING SHALL BE PERFORMED TO REMOVE LOOSE SAND BEFORE TO THE END OF EACH DAY'S WORK OR AS A FIRST ORDER OF WORK ON THE MORNING FOLLOWING APPLICATION OF THE SAND COVER. THE EXACT TIME OF BROOMING WILL BE DETERMINED BY THE ENGINEER.

TS-21 PAINT MARKINGS

DESCRIPTION

THIS WORK SHALL CONSIST OF CONSTRUCTING PAINTED PARKING STALL LINES, TRAFFIC STRIPES, CURBS, LEGENDS, AND WALKWAY DELINEATION TO THE LAYOUT AND COLOR THAT EXISTED PRIOR TO COMMENCEMENT OF THE CONTRACT WORK, UNLESS OTHERWISE DIRECTED BY THE PROJECT PLANS OR BY THE ENGINEER. THIS WORK ALSO INCLUDES RETOUCHING PREVIOUSLY PAINTED SURFACES MARRIED BY CONSTRUCTION ACTIVITIES AND ERADICATING EXISTING PAINT MARKINGS THAT CANNOT BE MATCHED. RESTRIPING IS NOT REQUIRED IN AREAS WITH NO CONSTRUCTION ACTIVITY UNLESS SPECIFICALLY NOTED.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO THE PROVISIONS OF SECTION **TS-20** OF THESE SPECIFICATIONS, TITLE III OF THE AMERICANS WITH DISABILITIES ACT AND ANY LOCAL CODES AS THOSE PROVISIONS RELATE TO RESTRIPING FOR HANDICAP ACCESS.

MATERIALS

PAINT FOR ASPHALT CONCRETE OR ASPHALT SEAL COATED SURFACES SHALL BE A WATER BORNE ACRYLIC AS MAY BE PERMITTED BY LOCAL AIR POLLUTION REGULATIONS, RAPID OR REGULAR DRY AT THE OPTION OF THE CONTRACTOR, COMMERCIALY AVAILABLE AND SPECIFIED BY THE MANUFACTURER AS BEING SUITABLE FOR MARKING AND STRIPING OF SEAL COATED AND NEW ASPHALT PAVEMENTS. PAINT FOR PORTLAND CEMENT SURFACES SHALL BE OIL BASED.

SURFACE PREPARATION

BEFORE APPLYING PAINT, THE PAVEMENT SURFACE SHALL BE CLEANED BY SWEEPING, BLOWING, VACUUMING, OR WASHING AS NECESSARY TO REMOVE MOISTURE, DIRT, OILS, GREASE, ACIDS, LAITANCE OR OTHER FOREIGN MATTER WHICH WOULD REDUCE THE BOND BETWEEN PAINT AND THE PAVEMENT.

CONTROL POINTS

THE CONTRACTOR SHALL LAY OUT ALL NECESSARY CONTROL POINTS FOR MARKINGS AND STRIPES.

MIXING

MECHANICAL MIXERS SHALL BE USED TO MIX PAINT. PRIOR TO APPLYING, THE PAINT SHALL BE MIXED TO UNIFORMLY BLEND PIGMENT AND SOLVENT TOGETHER, AND SHALL BE KEPT THOROUGHLY AGITATED DURING APPLICATION.

APPLICATION

ALL EQUIPMENT USED SHALL PRODUCE MARKINGS AND STRIPES OF UNIFORM QUALITY, TRUE TO LINE AND SPECIFIED THICKNESS.

PAINTED MARKINGS INCLUDING ARROWS, LEGENDS, STRIPING, AND CURBS ON ALL PAVEMENT SURFACES WITHIN THE AREA OF WORK ARE TO BE REPLACED WITH TWO (2) COATS OF PAINT. A CLEANING PRIOR TO SECOND COAT OR TRAFFIC CONTROL REQUIRED TO PROTECT THE PAINT SHALL BE INCLUDED IN THIS ITEM AT NO ADDITIONAL COST TO THE OWNER.

PAINTING SHALL BE APPLIED ONLY ON DRY SURFACE, WHEN TEMPERATURES ARE 50 DEGREES F., OR ABOVE, AND WHEN RAIN, FOG OR CONDENSATION WILL NOT CAUSE DAMAGE. PAINTING SHALL BE CEASED WHENEVER IT IS DETERMINED BY THE ENGINEER THAT WIND WILL PREVENT PROPER PAINT APPLICATION.

THE RATE OF PAINT APPLICATION SHALL BE ONE GALLON TO 125 SQUARE FEET, OR SUFFICIENT TO PRODUCE A WET FILM THICKNESS NOT LESS THAN 15 MILS.

THE CONTRACTOR SHALL PROVIDE NECESSARY PROTECTION FOR PAINTED SURFACES TO PROTECT FROM DAMAGE BY TRAFFIC AND PEDESTRIANS.

TS-22 WATERING

THE CONTRACTOR SHALL NOT DRAW WATER FROM ANY FIRE HYDRANT, EXCEPT TO EXTINGUISH A FIRE, WITHOUT FIRST OBTAINING PERMISSION (AND A METER IF REQUIRED) FROM THE WATER AGENCY CONCERNED.

FULL COMPENSATION FOR DEVELOPING WATER SUPPLY AND APPLYING WATER, INCLUDING WATER USED FOR ROLLERS, DUST CONTROL, AND CLEANUP, SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.

TS-23 CLEAN-UP

THE CONTRACTOR SHALL CLEAN UP THE JOBSITE PRIOR TO ACCEPTANCE OF THE WORK. ALL DIRT, SPOIL, AND DEBRIS OF ANY NATURE SHALL BE REMOVED AND THE ENTIRE SITE SHALL PRESENT A CLEAN, WORKMANLIKE APPEARANCE. ANY DAMAGE TO PAINT WORK, SPILLAGE, OR SPLATTERING FROM PRIME COATING, PAVING OR SEAL COATING OPERATIONS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER.

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\10 VICTORY HIGH SCHOOL\C1-C6 VICTORY HS EXHIBIT.dwg, Jan. 15, 2019--02:04 pm

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

<p>PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION</p>					<p>ORIGINAL SCALE IS IN INCHES</p> <p>0 1/2 1 1 1/2</p>	 <p>RFE ENGINEERING, INC Civil Engineers • Planners • Surveyors 2260 Douglas Blvd, Suite 160, Roseville, CA 95661 Ph: 916-772-7800 Fax: 916-772-7804 www.RFEengineering.com</p>	<p>ROCKLIN UNIFIED SCHOOL DISTRICT 2615 SIERRA MEADOWS DR., ROCKLIN, CA 95677 PH: (916) 630-2246</p>	<p>VICTORY HIGH SCHOOL 3250 VICTORY DR, ROCKLIN, CA 95765</p> <p>GENERAL NOTES</p>	<p>Sheet</p> <p>C2.3</p>									
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>QUANT.</td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>PGC</td> <td>RFE</td> </tr> <tr> <td>DESIGN</td> <td>PGC</td> <td>RFE</td> </tr> </table>				QUANT.			DRAWN	PGC	RFE	DESIGN	PGC	RFE	<p>4 of 8</p>
QUANT.																		
DRAWN	PGC	RFE																
DESIGN	PGC	RFE																
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK			<p>01/15/2019</p>									

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\10 VICTORY HIGH SCHOOL\C1-C6 VICTORY HS EXHIBIT.dwg Jan. 15, 2019-02:04 pm



PARKING AND DROP-OFF AREAS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	1/4"-1" Wide Rubberized Crack fill	LF	1,000
2	Seal Coat (Two Coats)	SF	30,600
3	Standard Parking Stalls	EA	67
4	ADA Symbol	EA	3
5	Accessible Unloading Area	EA	2
6	Stop Bar	EA	2
7	6' x 30' Crosswalk	EA	1
8	Arrow	EA	5
9	Red Curb Painting with "NPFL"	LF	425
10	Yellow Curb	LF	80
PLAYCOURT AREA			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
11	Seal Coat (Two Coats)	SF	13,600
12	Custom Basketball Court	EA	2

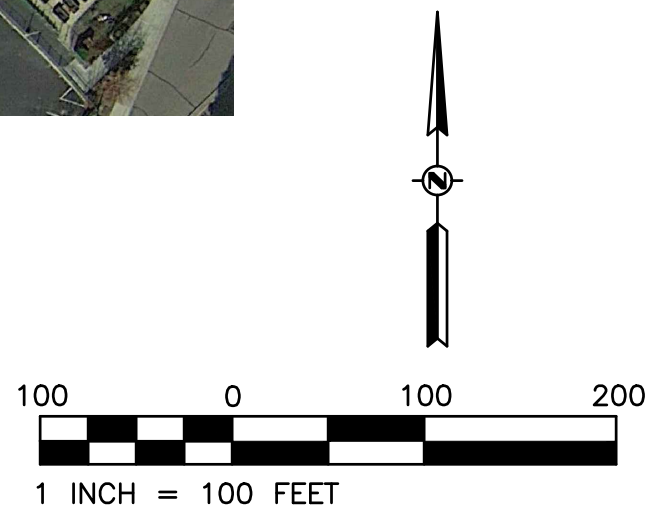
LEGEND

CRACK FILL, SEAL COAT, AND RE-STRIPE AS EXISTING



NOTES:

1. SEE CRACK FILL DETAILS ON SHEET C4.
2. SEAL COAT WILL BE DONE IN TWO (2) COATS. SEE DETAIL ON SHEET C4.
3. ALL CURBS WILL BE REPAINTED TO MATCH EXISTING. SEE DETAIL ON SHEET C4.
4. ALL STRIPING AND PAVEMENT MARKINGS WILL BE DONE IN TWO (2) COATS AND WILL BE RE-STRIPED AND RE-PAINTED TO MATCH EXISTING.



Know what's below.
Call before you dig.
 or (800) 227-2600

PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES 0 1/2 1 1 1/2		
					QUANT.		
	DRAWN	PGC	RFE				
	DESIGN	PGC	RFE				
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK	

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

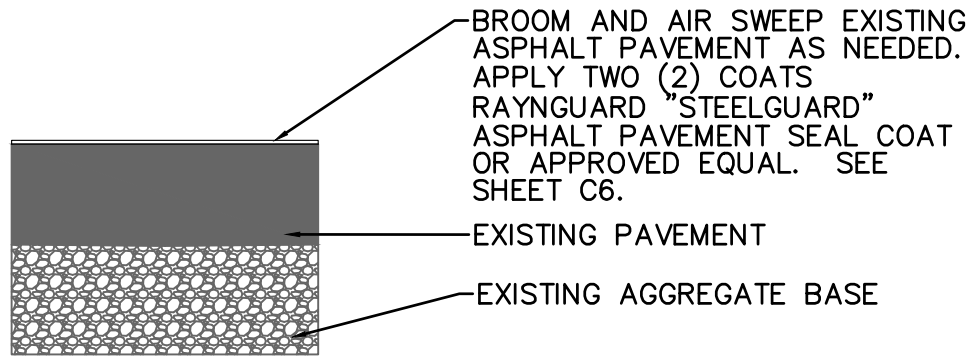
ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

VICTORY HIGH SCHOOL
 3250 VICTORY DR,
 ROCKLIN, CA 95765
CRACK FILL, SEAL COAT, AND STRIPING PLAN

Sheet
C3
5 of 8
01/15/2019

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\10 VICTORY HIGH SCHOOL\C1-C6 VICTORY HS EXHIBIT.dwg - Jan. 15, 2019 - 02:04 pm

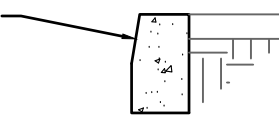


BROOM AND AIR SWEEP EXISTING ASPHALT PAVEMENT AS NEEDED. APPLY TWO (2) COATS RAYNGUARD "STEELGUARD" ASPHALT PAVEMENT SEAL COAT OR APPROVED EQUAL. SEE SHEET C6.

EXISTING PAVEMENT
EXISTING AGGREGATE BASE

POLYMER MODIFIED ASPHALT PAVEMENT SEAL COAT

SANDBLAST AND REMOVE ANY EXISTING LOOSE PAINT PRIOR TO NEW PAINT APPLICATION. PAINT COLOR TO MATCH EXISTING UNLESS OTHERWISE NOTED.



STANDARD CURB

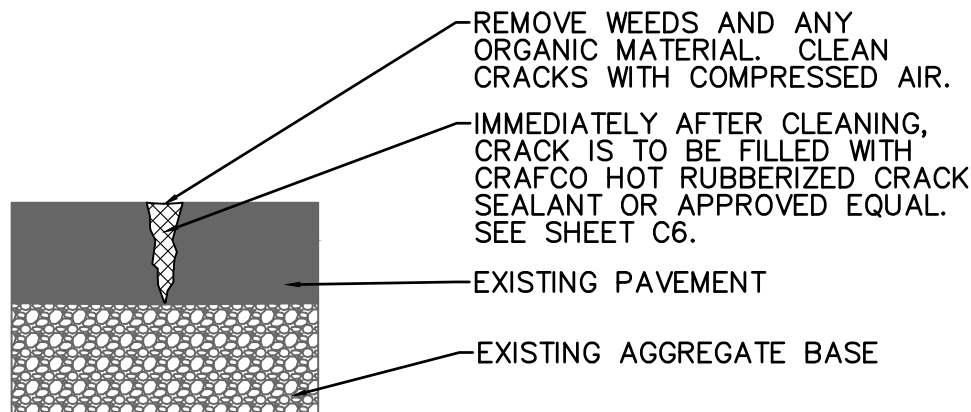
RAISED CURB REPAINTING



CURB MARKINGS AT FIRE LANES

NOTES:

- 1. REPAINT CURBS TO MATCH EXISTING COLOR AND MARKINGS.



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR. IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH CRAFCO HOT RUBBERIZED CRACK SEALANT OR APPROVED EQUAL. SEE SHEET C6.

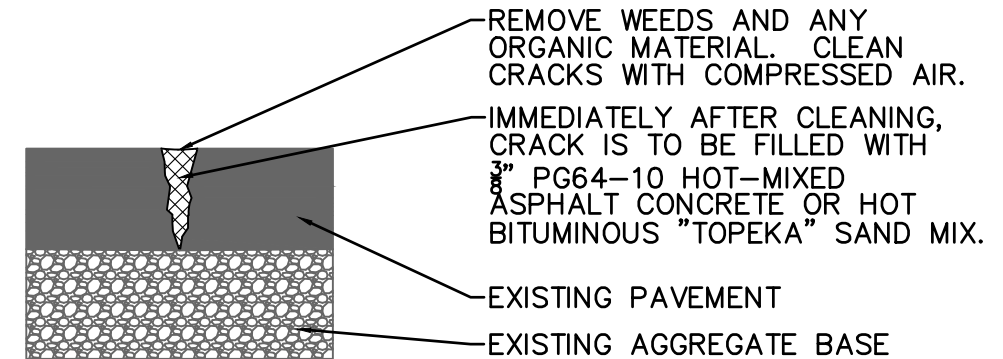
EXISTING PAVEMENT
EXISTING AGGREGATE BASE

CRACK WIDTHS 1/4" - 1"

NOTES:

- 1. CRACK WIDTHS LESS THAN 1/4" SHALL NOT BE SEALED.

ASPHALT CRACK SEAL WITH HOT RUBBERIZED SEALANT



REMOVE WEEDS AND ANY ORGANIC MATERIAL. CLEAN CRACKS WITH COMPRESSED AIR. IMMEDIATELY AFTER CLEANING, CRACK IS TO BE FILLED WITH 3/8" PG64-10 HOT-MIXED ASPHALT CONCRETE OR HOT BITUMINOUS "TOPEKA" SAND MIX.

EXISTING PAVEMENT
EXISTING AGGREGATE BASE

CRACK WIDTHS GREATER THAN 1"

ASPHALT CRACK REPAIR WITH HOT BITUMINOUS SAND MIX

PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES 0 1/2 1 1 1/2			
					QUANT.			
	DRAWN	PGC	RFE					
	DESIGN	PGC	RFE					
NO.	REVISION	DATE	BY	APPRV'D				
					BY			
					CHECK			

RFE ENGINEERING, INC
 Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

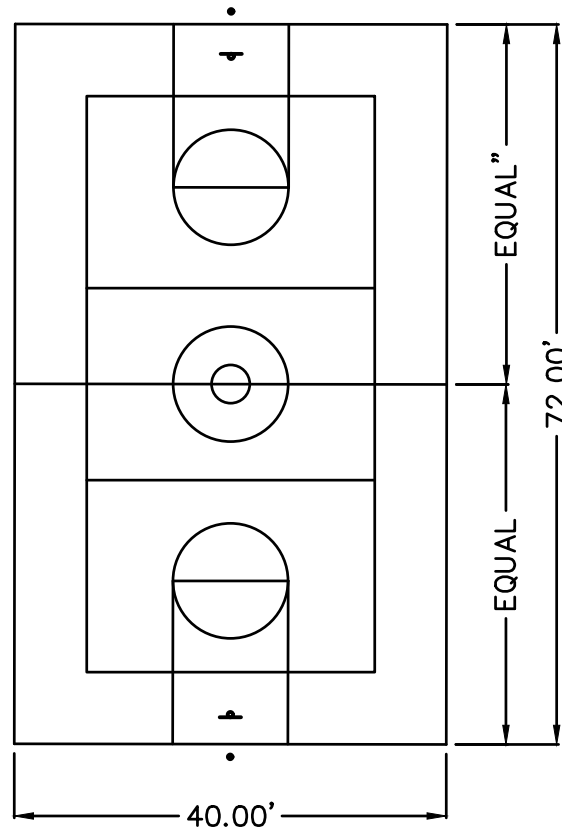
ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

VICTORY HIGH SCHOOL
 3250 VICTORY DR,
 ROCKLIN, CA 95765
AC PAVEMENT REPAIR DETAILS

Sheet	C4
	6 of 8
	01/15/2019

RFE PROJECT #18113 - ROCKLIN SCHOOLS PAVEMENT REHABILITATION

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\10 VICTORY HIGH SCHOOL\C1-C6 VICTORY HS EXHIBIT.dwg - Jan. 15, 2019 - 02:04 pm



CUSTOM BASKETBALL COURT

NOTES:

1. ALL PLAYCOURT STRIPING WILL BE RE-STRIPED AND RE-PAINTED AS EXISTING.
2. SHOWN DETAILS ARE FOR REFERENCE ONLY. VERIFY ACTUAL DIMENSIONS AND COLORED FINISH ON-SITE.
3. TYPICAL WHITE PAINT LINES ARE 3" WIDE.
4. ALL DIMENSIONS ARE TO INSIDE EDGE OF LINE.

PRELIMINARY PLAN DRAFT - NOT FOR CONSTRUCTION					ORIGINAL SCALE IS IN INCHES 0 1/2 1 1 1/2		
					QUANT.		
			DRAWN	PGC	RFE		
			DESIGN	PGC	RFE		
NO.	REVISION	DATE	BY	APPRV'D	BY	CHECK	

RFE ENGINEERING, INC
 Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd, Suite 160, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com

ROCKLIN UNIFIED SCHOOL DISTRICT
 2615 SIERRA MEADOWS DR.,
 ROCKLIN, CA 95677
 PH: (916) 630-2246

VICTORY HIGH SCHOOL
 3250 VICTORY DR,
 ROCKLIN, CA 95765
PLAYCOURT STRIPING DETAILS

Sheet
C5
7 of 8
01/15/2019



TECHNICAL DATA SHEET
STEELGUARD

A single package, water dispersed polymer modified, slate and mineral filled, black, asphalt coating. The product, following minimal dilution with potable water, may be easily applied by squeegee or spray applied with proper, heavy duty commercial equipment. It is designed to restore minor pavement surface profile loss; and to professionally seal all asphalt surfaces against accelerated deterioration from sun, wind, rain, tire abrasion and mild chemical attack.

Available in 5 and 55 gallon containers; and in bulk.

ADVANTAGES:

- May be applied above 50°F (10°C) and rising on most dry or slightly damp surfaces. (May be applied in cooler temperatures with the use of fast drying additives or under favorable conditions - See "Drying").
- SteelGuard provides excellent coverage with a higher film thickness per coat due to higher aggregate/binder content. Helps fill minor surface (non-working) cracks in the pavement to eliminate water penetration.
- SteelGuard provides excellent adhesion.
- Excellent curing properties under normal conditions. Assists in nighttime installations without direct sun loading. Quick-setting additives are available for more challenging installations.
- Will resist re-emulsification once fully cured. Traffic striping immediately after curing may be achieved without discoloration.
- Resistant to tire scuff and power steering abuse.
- Contains no bio-accumulative metals or chemicals. Non-hazardous in cured form; therefore, may be disposed as cured residue into any municipal land fill.

USES:

- Designed for application as a professional protective coating of asphalt pavements including driveways, playgrounds, parking lots, bike paths, surface streets, highways and airport taxiways and runways.
- Available in modified forms for various color applications, skid resistant requirements or for applications in demanding situations or on alternative surface materials.

APPLICATION:

Apply only onto clean, dry or damp surfaces from which all contaminants have been removed; i.e. built-up crankcase drippings, oil spots, loose traffic paint, etc. Areas upon which a high build-up of grease or loose paint exists shall be scraped, wire brushed and cleaned to eliminate oil residue from the underlying, sound asphaltic substrate. Prior to application it is recommended that these treated areas be further prepared by surface priming with an approved Oil Spot Treatment.

SteelGuard may be modified for special applications with a variety of polymers, adhesion packages, set control additives and select size aggregates for friction/skid promotion. Please contact your supplier for details.

SHIPPING INFORMATION:

CONTAINER SIZE	UNITS PER PALLET	CUBIC FT PER PALLET	WEIGHT PER PALLET	PALLETS PER 48' TRAILER
5 Gallon Pails	32	50	~ 1950	18
55 Gallon Drums	4	58	~ 2500	20

PHYSICAL PROPERTIES:

Water Absorption	< 1%	ASTM D-570
Weight per gallon	10.5 – 11.5 lbs/gallon	ASTM D-1475
Percent Solids	57 - 62	
Wet Track Abrasion	<35 grams / s.f.	ISSA A-105, T-100
VOC	< 10 grams / liter	BAAQMD Vol 3 Lab 22

SteelGuard contains 4.5 pounds of crushed aggregate, or more, per gallon and is supplied in a high viscosity, semi-paste consistency. The formula is balanced to provide suspension of the aggregate particles but stirring or mixing should be done prior to use to assure a balanced mix.

Immediately prior to application a pre-determined, small quantity of potable water shall be slowly mixed into the contents at an equivalent rate of one to five percent by volume (1 – 5% under normal conditions; up to as much as 10% under very hot conditions) of the **SteelGuard**.

Do not over dilute this product as this will terminate the anti-settling qualities of the **SteelGuard** and could possibly diminish the useful qualities of its cured physical properties.

DRYING: **SteelGuard** is one of the fastest curing pavement surfacing materials available. However, all waterborne curing rates are dependent upon evaporation of the water contained within the formula. The combined effects of surface temperature, air temperature, sun load, wind and humidity will determine the atmospheric water removal capabilities at any given moment. The professional installer will gain valuable experience in gauging time-to-cure by observing cure times against spread rates within the range of these five indicators.

Do not apply this product unless sufficient weather conditions exist to assure full cure prior to being subjected to rain, fog or other inclement weather or heavy traffic.

It is recommended that the inexperienced applicator use spread rates of 20 gallons per 1000 square foot, during daylight hours, at surface and air temperatures above 55° F (13°C) and rising with no rain, fog or other inclement weather in the forecast for at least 24 hours.

Immediately after application, clean implements, including hoses, with cool water after application. **SteelGuard** may crosslink & cure if left standing in sun exposed spray hoses.

TRANSPORTATION, STORAGE AND HANDLING:

- DOT: not regulated
- Keep/store out of direct sunlight.
- Do not allow to freeze prior to application.
- Do not mix with any other products.
- Keep containers tightly sealed when not in use.
- Avoid prolonged skin contact.
- Do not take internally. Do not induce vomiting if swallowed - call a physician immediately.
- Store, handle and dispose per MSDS requirements.



PRODUCT DATA SHEET
SUPERFLEX HT
PART NO. 34533

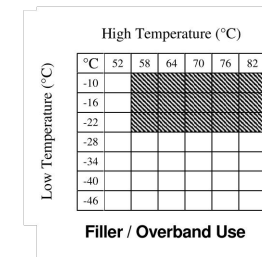
SEPTEMBER 2016

6165 W Detroit St. • Chandler AZ 85226
+1 (602) 276-0406 • +1 (800) 528-8242 • FAX +1 (480) 961-0513
www.crafco.com

READ BEFORE USING THIS PRODUCT

GENERAL Crafco Superflex HT sealant is a hot-applied asphalt based product used to fill cracks in asphalt concrete or Portland cement concrete pavements in moderate to very hot climates. Superflex HT is supplied in solid form which when melted and properly applied forms an adhesive and flexible compound that resists cracking in the winter and is highly resistant to tracking or pick-up by vehicle tires in hot climates. Superflex HT is used in highway, street, airfield and parking lot pavements and is applied to pavement cracks using either pressure feed melter applicators or pour pots. At application temperature, Superflex HT is a low viscosity, self-leveling product which easily penetrates narrow cracks. Superflex HT can be melted in jacketed double type melting units, or in small direct bottom fired types of melters. Both melter types must have sufficient agitation and temperature indicating devices to assure that the material is heated to and maintained within the specified application temperature range of 380° to 400°F (193 to 204°C). VOC = 0 g/l.

USAGE GUIDELINES Superflex HT is applicable for Filler/Overband Use in moderate to very hot climates with high and low pavement temperatures identified in the chart. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBIND V 3.1, and sealant or filler use is determined following Crafco Product Selection procedures.



SPECIFICATION CONFORMANCE

Crafco Superflex HT meets the following requirements when heated to the maximum heating temperature in accordance with ASTM D5167:

Tests

Softening Point (ASTM D36)
Flexibility, 1/8" (3.2 mm) specimen, 90° bend, 10 sec., 1" (25mm) mandrel (ASTM D3111 modified)
Cone Penetration (ASTM 5329)
Flow, 140°F (60°C), 5 hr. (ASTM D5329)
Elongation 77°F (25°C) (ASTM D412 die C)
Opening to Traffic Time
Maximum Heating Temperature
Application Temperature Range

Specification Limits

210°F (99°C) min.
Pass at 0°F (-18°C)
45 max.
0 mm.
1000% min.
30 minute max.
400°F (204°C)
380-400°F (193-204°C)

INSTALLATION

The unit weight of Crafco Superflex HT is 9.2 lbs./gal. (1.10 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Superflex Sealants to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of sealant.

PACKAGING

Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x 102 cm) 4-way pallets; can be stored outside, and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.
• **BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
• **PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

WARRANTY

CRAFCO, Inc. warrants that CRAFCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**

©2016, Crafco, Inc., #A1143

POLYMER MODIFIED SEAL COAT

HOT-APPLIED RUBBERIZED CRACK SEALANT

Z:\2018 Projects\18113 Rocklin Schools Pavement Evaluation\WORKING CAD\10 VICTORY HIGH SCHOOL\C1-C6 VICTORY HS EXHIBIT.dwg, Jan. 15, 2019--02:04 pm

PRELIMINARY PLAN
DRAFT - NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY	APPRV'D

ORIGINAL SCALE IS IN INCHES
0 1/2 1 1 1/2

QUANT.		
DRAWN	PGC	RFE
DESIGN	PGC	RFE
	BY	CHECK



ROCKLIN UNIFIED SCHOOL DISTRICT
2615 SIERRA MEADOWS DR.,
ROCKLIN, CA 95677
PH: (916) 630-2246

VICTORY HIGH SCHOOL
3250 VICTORY DR,
ROCKLIN, CA 95765
MATERIAL SPECIFICATONS

Sheet	C6
8 of 8	01/15/2019

Parcel Viewer Print



1/10/2024, 6:29:00 AM




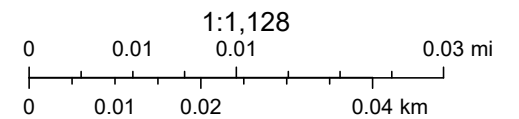
-  Placer Cities
-  Parcels
-  County Boundary

Exhibit A



City of Rocklin

Exhibit B BID FORM

Sealed Bids will be received at the Rocklin Unified School District Office located at 2615 Sierra Meadows Drive, Rocklin CA 95677, until 2:00 PM on February 13, 2024.

Pursuant to and in compliance with your Notice to Contractors Calling for Bids and other documents relating thereto, the undersigned bidder, having thoroughly examined and familiarized himself with the terms of the Contract, the local conditions affecting the performance of the Contract and the cost of the work at the place where the work is to be done, and with the drawings and specifications and other Contract Documents, hereby proposes and agrees to perform, within the time stipulated, the Contract, including all of its component parts, and everything required to be performed, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all utility and transportation services necessary to perform the Contract and complete in a workmanlike manner all of the work required in connection with the:

Summer 2024 Asphalt Projects

all in strict conformity with the drawings and specifications and other Contract Documents, including addenda nos. ____, ____, ____, and _____, on file at the office of ____ of District for the sum of:

BID TOTAL:

Item	School / Site	Scope of Work Description	Unit Price	Total
1	Breen Elementary	Slurry Seal, Crack fill, Striping, Painting, Curb repainting (no patchwork) refer to drawing		
2	Sierra Elementary	Slurry Seal, Crack fill, Striping, Painting, Curb repainting (no patchwork) refer to drawing		
3	Granite Oaks Middle School	Slurry Seal, Crack fill, Striping, Painting, Curb repainting (no patchwork) refer to drawing		
4	Spring View Middle School	Slurry Seal, Crack fill, Striping, Painting, Curb repainting (no patchwork) refer to drawing		
5	Victory High School	Slurry Seal, Crack fill, Striping, Painting, Curb repainting (no patchwork) refer to drawing		

Item	School / Site	Scope of Work Description	Unit Price	Total
6	District Office	Slurry Seal, Crack fill, Striping, Painting, Curb repainting (no patchwork) refer to map		
7	Cobblestone Elementary	Crack Fill only 3,200 LYFT		
8	Parker Whitney Elementary	Crack Fill only 4,200 LYFT		
9	Ruhkala Elementary	Crack Fill only 3,000 LYFT		
10	Valley View Elementary	Crack Fill only 1,600 LYFT		
11	Antelope Creek Elementary	Crack Fill only 2,700 LYFT		
12	Rock Creek Elementary	Crack Fill only 4,000 LYFT		
13	Rocklin Elementary	Crack Fill only 3,200 LYFT		
14	Twin Oaks Elementary	Crack Fill only 3,000 LYFT		
15	10 % Owners Contingency			
16	Bid Total			

_____ Dollars and _____ Cents. (\$_____).

1. It is understood that the District reserves the right to reject this bid and that this bid shall remain open and not be withdrawn for the period specified in the Notice to Contractors Calling for Bids.
2. The following forms are to be submitted with the bid. Failure to submit these forms may render the bid non-responsive:

Bid Form
 Non-Collusion Declaration
 List of Subcontractors Form
 Bid Bond or Bid Guarantee Form
 Work Hours and Safety Standards
 Experience & Qualifications

3. It is understood and agreed that if written notice of the acceptance of this bid is mailed, emailed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District the Contract attached hereto in accordance with the bid as accepted. The undersigned will also furnish and deliver to the District an executed Contractor, the Performance Bond and Payment Bond for Public Works as specified, and any other required documents all within **five (5) business days after Notice of Intent to Award**. The work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, on the date to be stated in the District's Notice to the Contractor to Proceed and shall be completed by the Contractor in the time specified in the Contract Documents.
4. Bidder certifies that he is licensed in accordance with the law providing for the registration of Contractors, License No. _____, Expiration Date _____ Class of license _____ DIR Registration No. _____.

I, _____, the _____ of the bidder, hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted by the bidder in connection with this bid and all of the representations made herein are true and correct.

Executed on this _____ day of _____, 2024 at _____ County, California.

Name of Bidder _____

By _____

Signature of Bidder

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signatures of authorized officers or agents; if bidder is a partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his or her signature shall be placed above.

Business Address: _____

Place of Residence: _____

Telephone: () _____

Exhibit B

NON-COLLUSION DECLARATION

The undersigned declares:

I am the _____ [Title] of _____ [Name of Company],
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 this:

_____ day of _____

City of _____ State of _____

Signed: _____

Title: _____

LIST OF SUBCONTRACTORS FORM

In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 et seq.,) and any amendments thereof, each Bidder shall set forth below: (a) The name, the location of the place of business, the California contractor license number, and public works contractor registration number issued pursuant to Section 1725.5 of the Labor Code of each subcontractor who will perform work or labor or render service to the Contractor, who will perform work or labor or work or improvement to be performed under this Contract, 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 improvements according to detailed Drawings contained in the Plans and Specifications in an amount in excess of one-half of one percent of the Contractor's total bid; and (b) the portion and description of the work which will be done by each subcontractor under this Act. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in this bid. All subcontractors shall be properly licensed by the California State Licensing Board.

If a Contractor fails to specify a subcontractor, or if a Contractor specifies more than one subcontractor for the same portion of work to be performed under the Contract in excess of one-half of one percent of the Contractor's total bid, the Contractor shall be deemed to have agreed that the Contractor is fully qualified to perform that portion, and that the Contractor alone shall perform that portion of the work.

No Contractor whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow the relevant portion of the work to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the Contractor's total bid where the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act.

Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the Contractor's total bid where no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record, of the authority awarding this Contract setting forth the facts constituting the emergency or necessity.

All subcontractors (of any tier) performing any portion of the work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project.

NOTE: If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such Alternate

LIST OF SUBCONTRACTORS FORM

Scope of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	DIR Registration Number*	<i>E-Mail & Telephone*</i>

Name of Bidder:

Date:

Name:

Signature of Bidder Representative:

BID BOND FORM

KNOW ALL MEN BY THESE PRESENT that we, the undersigned, (hereafter called "Principal"), and _____ (hereafter called "Surety"), are hereby held and firmly bound unto the _____ School District (hereafter called "District") in the sum of _____ (\$_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

SIGNED this _____ day of _____, 2024.

The condition of the above obligation is such that whereas the Principal has submitted to the District a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of:

Summer 2024 Asphalt Projects

NOW, THEREFORE,

- a. If said Bid is rejected, or
- b. If said Bid is accepted and the Principal executes and delivers a Contract or the attached Agreement form within five (5) calendar days after the date of the Notice of Intent to Award (properly completed in accordance with said Bid), and furnishes bonds for his faithful performance of said Contract and for payment of all persons performing labor or furnishing materials in connection therewith,

Then this obligation shall be void; otherwise, the same shall remain in force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or the call for bids, or the work to be performed thereunder, or the specifications accompanying the same, shall in anyway affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of said Contract, or the call for bids, or the work, or to the specifications.

In the event suit is brought upon this bond by the District and judgment is recovered, the Surety shall pay all costs incurred by the District in such suit, including without limitation, attorneys' fees to be fixed by the court.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year first set forth above.

(Corporate Seal)

By _____
Principal's Signature

Typed or Printed Name

(Corporate Seal)

Principal's Title

By

Surety's Signature

Typed or Printed Name

Title

(Attached Attorney in Fact Certificate)

Surety's Name

Surety's Address

Surety's Phone Number

BID GUARANTEE FORM
(Use only when not using a Bid Bond)

Accompanying this proposal is a cashier's check payable to the order of the _____ School District or a certified check payable to the order of the Rocklin Unified School District in an amount equal to ten percent (10%) of the base bid and alternates (\$_____).

The proceeds of this check shall become the property of said District, if, this proposal shall be accepted by the District through the District's Governing Board, and the undersigned fails to execute a Contract with and furnish the sureties required by the District within the required time; otherwise, said check is to be returned to the undersigned.

Bidder

CERTIFICATION REGARDING WORK HOURS AND SAFETY STANDARDS

Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

The undersigned subcontractor certifies it will comply with the contract work hours and safety standards act:

- No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- In the event of any violation of the clause set forth in first paragraph of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States Department of Labor for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in first paragraph of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in first paragraph of this section.
- The United States Department of Agriculture shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- The contractor or subcontractor shall insert in any subcontracts the clauses set forth in previous paragraphs of this section and also a clause requiring the subcontractors to include These clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in previous paragraphs of this section.

Exhibit B

Name of Organization/Firm

Signature of Authorized Representative

Date

Print Name and Title of Authorized Representative

EXPERIENCE QUALIFICATIONS

The Bidder has been engaged in the contracting business, under the present business name for _____ years. Experience in work of a nature similar to that covered in the Bid extends over a period of _____ years.

The Bidder, as a contractor, has never failed to satisfactorily complete a contract awarded to it, except as follows:

The following contracts have been satisfactorily completed in the last three years for the persons, firm or entity indicated:

Year	Owner	Type of Work	Contract Amount

Executed on _____, at _____, _____

BIDDER

Company Name: _____

Authorized Signature: _____

Printed Name: _____

Title: _____

AGREEMENT BETWEEN OWNER AND CONTRACTOR

This Agreement between Owner and Contractor (“Agreement”) is entered into effective upon receipt of fully executed contract between the Rocklin Unified School District, Placer County, California (“Owner”) and _____ (“Contractor”), with Owner and Contractor each a “Party” and together the “Parties” to this Agreement.

Contractor and Owner agree as follows:

1. SCOPE OF WORK. Contractor agrees to furnish all labor, equipment and materials, including tools, implements, and appliances and to perform all the work in a good and workmanlike manner, free from any and all liens and claims from mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, freight carriers, and laborers, all in strict compliance with the Contract Documents, required for construction of the Project (the “Project”) described below and as more fully described in the attached exhibit “A”:

Project: Summer 2024 Asphalt Projects

Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, transportation, and other facilities and services necessary for the proper execution and completion of the Project. The Contractor shall at all times enforce strict discipline and good order among Contractor’s employees and subcontractors and shall not employ on the Project anyone not skilled in the task assigned. Any employee of Contractor or employee of Contractor’s subcontractors, suppliers or materialmen Owner deems not skilled for the task assigned shall, upon Owner’s request, be dismissed from the site.

2. EXAMINATION OF SITE. Contractor has visited the site and investigated the conditions on, in, out and about the site, including any buildings, which might affect the progress of the Project and is satisfied as to those conditions. No claim for money or time will be allowed as to such matters.

3. CONTRACT DOCUMENTS. The Contractor and Owner agree that the Contract Documents are composed of this Agreement, required insurance certificates, additional insured endorsement and declarations page, Designation of Subcontractors, Noncollusion Declaration, Roof Project Certification (where applicable), Sufficient Funds Declaration (Labor Code Section 2810), the Fingerprinting Notice and Acknowledgment, Independent Contractor Student Contact Form, any required bonds, and any specifications and plans. If there are specifications and plans, the specifications and plans are intended to cooperate, so that any work exhibited in the plans and not mentioned in the specifications, or vice versa, is to be executed the same as if both mentioned in the specifications and set forth in the plans to the true intent and meaning of the said plans and specifications, when taken together. The Contract Documents are

complementary, and each obligation of the Contractor, subcontractors, and material or equipment suppliers in any one shall be binding as if specified in all. Where requirements of the Contract Documents exceed those of the applicable building codes and ordinances, the Contract Documents shall govern. Contractor shall comply with all applicable Federal, State and local laws. The work shall constitute a “work of improvement” under Civil Code Section 8050 and Public Contract Code Section 7107.

4. COMPLETION DATE. The work to be completed under this Agreement shall begin no earlier than June 10, 2024, after fully executed contract is received, all work is to be completed on or before August 2, 2024 (the “Completion Date”) weather permitting.

5. CONTRACT SUM. The Contract Sum is the total amount payable by Owner to Contractor for the performance of work under the Contract Documents. The Contract Sum is _____ Cents (\$_____), unless modified in accordance with the Contract Documents.

6. CONTRACTOR’S LICENSE, REGISTRATION AND COMPLIANCE MONITORING. In accordance with Section 3300 of the Public Contract Code, Contractor has a Class “**A-General Engineering**” which shall be maintained in good standing for the duration of Contractor’s work on the Project. Public works projects shall be subject to compliance monitoring and enforcement by the Department of Industrial Relations. The Owner shall not enter into any contract without proof of the Contractor’s current registration to perform public work under Labor Code Section 1725.5. The Contractor shall not enter into any subcontract without proof of the subcontractor’s current registration to perform public work under Labor Code Section 1725.5. A contractor or subcontractor shall not be qualified to enter into, or engage in the performance of, any contract of public work (as defined by Division 2, Part 7, Chapter 1 (§§1720 *et seq.*) of the Labor Code) unless currently registered and qualified under Labor Code Section 1725.5 to perform public work.

7. LIQUIDATED DAMAGES. Failure to complete the Project within the time and in the manner provided for in this Agreement shall subject the Contractor to liquidated damages. For purposes of liquidated damages, the concept of substantial completion shall not constitute completion and is not part of the Contract Documents. The actual occurrence of damages and the actual amount of the damages which the Owner would suffer if the Project were not completed within the specified times set forth are dependent upon many circumstances and conditions which could prevail in various combinations and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include, but are not limited to, loss of the use of the Project, disruption of activities, costs of administration, supervision and the incalculable inconvenience and loss suffered by the public.

Accordingly, the Parties agree that the amount herein set forth shall be the amount of damages which the Owner shall directly incur upon failure of the Contractor to complete

the Project within the time specified: \$150, for each calendar day by which completion of the Project is delayed beyond the Completion Date, as adjusted by change orders.

If the Owner accepts any work or makes any payment under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of completion and liquidated damages.

8. EARLY COMPLETION. Regardless of the cause therefore, the Contractor may not maintain any claim or cause of action against the Owner for damages incurred as a result of its failure or inability to complete its work on the Project in a shorter period than established in this Agreement, the Parties stipulating that the period established in this Agreement is a reasonable time within which to perform the work on the Project.

9. PAYMENT. Owner will pay Contractor on a monthly basis for services satisfactorily performed after receipt of properly documented and submitted applications for payment. On or before the fifth day of each month, Contractor shall submit to Owner an itemized application for payment in the format supplied by the Owner indicating the amount of work completed since commencement of the work or since the last progress payment, as applicable. These applications shall be supported by evidence which is required by this Agreement and such other documentation as the Owner may require. The Contractor shall certify that the work for which payment is requested has been done and that the materials listed are stored where indicated. Contractor may be required to submit a detailed schedule of values upon request of the Owner and in such detail and form as the Owner shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. For each accepted payment, five percent (5%) shall be withheld and retained by the Owner, and the remainder shall be paid to the Contractor.

If the Contractor becomes liable under this section, the Owner, in addition to all other remedies provided by law, shall have the right to withhold any and all retained percentages of payments and/or progress payments, and to collect the interest thereon, which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined. If the retained percentages and withheld progress payments appear insufficient to discharge all liabilities of the Contractor incurred under this Article, the Contractor and its sureties shall continue to remain liable to the Owner for such liabilities until all such liabilities are satisfied in full. Owner may withhold payment and/or retention, in whole, or in part, to such extent as may be necessary to protect the Owner from loss because of: (a) Defective work not remedied; (b) Stop Payment Notices filed, unless the Contractor at its sole expense provides a bond or other security satisfactory to the Owner in the amount of at least one hundred twenty-five percent (125%) of the claim, in a form satisfactory to the Owner, which protects the Owner against such claim and which Owner chooses to accept. Any stop payment notice release bond shall be executed by a California admitted, fiscally solvent surety, completely unaffiliated with and separate from the surety on the payment and performance bonds, that does not have any assets pooled with the payment and

performance bond sureties. The surety insurer, at the time of issuance of the bond, unless otherwise agreed to by Owner in writing, must have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurer selected by Contractor and to require Contractor to obtain a bond from a surety insurer satisfactory to the Owner; (c) Liquidated damages assessed against the Contractor; (d) Reasonable doubt that the work can be completed for the unpaid balance of any Contract Sum or by the completion date; (e) Damage to the Owner, another contractor, or subcontractor; (f) Unsatisfactory prosecution of the work by the Contractor; (g) Failure to store and properly secure materials; (h) Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents; (i) Failure of the Contractor to maintain record drawings; (j) Erroneous estimates by the Contractor of the value of the work performed, or other false statements in an Application for Payment; (k) Unauthorized deviations from the Contract Documents; or (l) Failure of the Contractor to prosecute the work in a timely manner in compliance with established progress schedules and completion dates; (m) Subsequently discovered evidence or observations nullifying the whole or part of a previously issued payment; (n) Failure to pay subcontractors or materialmen; (o) Breach of any provision of the Contract Documents. Owner's failure to withhold any of these sums from a progress payment and/or retention shall not constitute a waiver of Owner's right to such sums.

If the Owner accepts any work or makes any release of payment payments or retention under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of completion and liquidated damages.

In accordance with Public Contract Code Section 22300, the Owner will permit the substitution of securities for any retention monies withheld by the Owner to ensure performance under the Agreement. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the Owner, or with a state or federally chartered bank as the escrow agent, who shall then pay such retention monies to the Contractor. Upon completion of the work, the securities shall be returned to the Contractor if Owner has no basis to withhold under the Contract Documents. 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 the Contractor and the Owner. The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. The escrow agreement used for the purposes of this Section shall be substantially similar to the form set forth in Public Contract Code Section 22300.

10. CHANGE ORDERS. The Contractor and the Owner agree that changes in the Project to be done under this Agreement and any plans and specifications shall become effective only when written in the form of a change order approved and signed by the Owner and the Contractor. It is specifically agreed that the Owner shall have the right to request any alterations, deviations, reductions, or additions to the Project and the amount

of the cost thereof shall be added to or deducted from the amount of the Contract Sum by fair and reasonable valuations. Contractor also agrees to provide the Owner with all information requested to substantiate the cost of the change order and to inform the Owner whether the work will be done by the Contractor or by a subcontractor.

This Agreement shall be deemed to be completed when the Project is finished in accordance with this Agreement, and any original plans and specifications as amended by such changes.

The Contractor shall submit with the proposed change order its request for time extension (if any), and include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the Project. The time extension shall be agreed to by the Parties and memorialized by a written change order prior to initiation of the work contemplated by the change order.

11. DISPUTES. If a dispute arises between the Owner and the Contractor as to an interpretation of any of the specifications or Contract Documents or as to the quality or sufficiency of materials or workmanship, the decision of the Owner shall for the time being prevail, and the Contractor, without delaying the job, shall proceed as directed by the Owner without prejudice to a final determination of the dispute.

12. CLAIMS. “Claim” for this purpose means a separate demand by the Contractor for a time extension, payment of money or damages arising from work done by or on behalf of the Contractor pursuant to this Agreement, for which payment is expressly provided, or the Contractor is otherwise entitled to, or an amount the payment of which is disputed by the Owner. Notwithstanding any other provision herein, Claims shall be handled pursuant to the procedures set forth in Public Contract Code Section 9204, including claim, written response, payments, meet and confer conference, statement of disputed and undisputed portions after the meet and confer conference and non-binding mediation, and Government Code claim provisions. Owner may request additional documentation from Contractor to be provided within applicable time periods, and Owner and Contractor shall reasonably cooperate to schedule and attend mediation as soon as reasonably possible.

As a precedent to initiation of any litigation against the Owner, Contractor must observe and comply with the Government Code claim procedures in Government Code Sections 901 et seq. after completion of the claim procedures above, including but not limited to timely presentation of a Government Code claim. The claim procedures described herein do not supersede or replace the requirement of a Government Code claim, and the two claim procedures shall be sequential. The requirement for mediation shall not toll or supersede the requirement for submission of a Government Code claim. If Contractor fails to timely notify the Owner in writing that it wishes to mediate pursuant to this paragraph, then Contractor will have waived all rights to further pursue the Claim. The parties shall reasonably cooperate to schedule and attend mediation as soon as reasonably possible.

13. TERMINATION. If the Contractor should be adjudged bankrupt, or if the Contractor should make a general assignment for the benefit of Contractor's creditors, or if a receiver should be appointed on account of Contractor's insolvency, or if Contractor or any of Contractor's subcontractors should violate any of the provisions of the Agreement, or if Contractor should refuse or fail to supply enough properly skilled workmen or proper materials, or if Contractor violates Labor Code Section 1771.1(a), subject to the provisions of Labor Code Section 1771.1(f), or should fail to make prompt payment to subcontractors or for material or labor, or disregard laws, ordinances or the instructions of the Owner, then the Owner may serve written notice upon the Contractor of its intention to terminate the Agreement. Unless, within five (5) days after the serving of such notice, such violations shall cease and satisfactory arrangements for corrections thereof be made, the Agreement shall, upon the expiration of said five (5) days, at the Owner's option, terminate.

The Owner may then take over the Project and prosecute the same to completion by any method it may deem advisable, for the account and at the expense of the Contractor, and the Contractor shall be liable to the Owner for any excess cost occasioned the Owner thereby. In such event, the Owner may without liability for so doing, take possession of and utilize in completing the Project, such materials, appliances and other property belonging to the Contractor as may be on the site of the Project and necessary therefore. In such case the Contractor shall not be entitled to receive payment until the Project is finished. If the Contract Sum exceeds the expense of finishing the Project, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed the Contract Sum, the Contractor shall pay the difference to the Owner.

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall (1) cease operations as directed by the Owner in the notice; (2) take actions necessary, or that the Owner may direct, for the protection and preservation of the work; and (3) except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders. In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for work executed, and costs incurred by reason of such termination.

14. SUBCONTRACTORS. If Contractor shall subcontract any part of the work, Contractor shall be fully responsible to Owner for acts or omissions of Contractor's subcontractors. Pursuant to Public Contract Code Section 6109, no contractor may perform work on a public works project with a subcontractor who is ineligible to perform work on the project pursuant to California Labor Code Sections 1777.1 or 1777.7.

15. PREVAILING WAGES. The Project is a public work, the Work shall be performed as a public work and under California Labor Section Code 1770 *et seq.*, the Director of Industrial Relations has determined the general prevailing rate of per diem

wages and the general prevailing rate for holiday and overtime work in the locality in which the work is to be performed, for each craft, classification or type of worker needed to execute this Contract. Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, apprenticeship or other training programs, and similar purposes. Copies of the rates are on file at the Owner's principal office. The rate of prevailing wage for any craft, classification or type of workmanship to be employed on this Project is the rate established by the applicable collective bargaining agreement which rate so provided is hereby adopted by reference and shall be effective for the life of this Agreement or until the Director of the Department of Industrial Relations determines that another rate be adopted. It shall be mandatory upon the Contractor and on any subcontractor to pay not less than the said specified rates to all workers employed in the execution of this Agreement. Contractor shall post on site all required job site notices as prescribed by regulation.

The Contractor and any subcontractor under the Contractor as a penalty to the Owner shall forfeit not more than Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed. The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall keep or cause to be kept an accurate record for work on this Project showing the names, addresses, social security numbers, work classification, straight time and overtime hours worked and occupations of all laborers, workers and mechanics employed by them in connection with the performance of this Contract or any subcontract thereunder, and showing also the actual per diem wage paid to each of such workers, which records shall be open at all reasonable hours to inspection by the Owner, its officers and agents and to the representatives of the Division of Labor Standards Enforcement of the State Department of Industrial Relations. Contractor and subcontractors shall comply with Labor Code Section 1776.

16. WORKING HOURS. In accordance with the provisions of California Labor Code Sections 1810 to 1815, inclusive, the time of service of any worker employed by the Contractor or a subcontractor doing or contracting to do any part of the work contemplated by this Agreement is limited and restricted to eight hours during any one calendar day and forty hours during any one calendar week, provided, that work may be performed by such employee in excess of said eight hours per day or forty hours per week provided that compensation for all hours worked in excess of eight hours per day, and forty hours per week, is paid at a rate not less than one and one-half (1½) times the basic rate of pay. The Contractor and every subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by them in connection with the work. The records shall be kept open at all reasonable hours to inspection by representatives of the Owner and the

Division of Labor Law Enforcement. The Contractor shall as a penalty to the Owner forfeit Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Agreement by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day, and forty hours in any one calendar week, except as herein provided.

17. APPRENTICES. The Contractor agrees to comply with Chapter 1, Part 7, Division 2, Sections 1777.5 and 1777.6 of the California Labor Code, which are hereby incorporated and made a part hereof. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice's work for each five hours of work performed by a journeyman (unless an exemption is granted in accordance with Section 1777.5) and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public works solely on the ground of sex, race, religious 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 signed written apprentice agreements, will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the Contractor for all apprenticeable occupations.

18. DSA OVERSIGHT PROCESS. The Contractor must comply with the applicable requirements of the Division of State Architect ("DSA") Construction Oversight Process ("DSA Oversight Process"), including but not limited to (a) notifying the Owner's Inspector of Record/Project Inspector ("IOR") upon commencement and completion of each aspect of the work as required under DSA Form 156; (b) coordinating the work with the IOR's inspection duties and requirements; (c) submitting verified reports under DSA Form 6-C; and (d) coordinating with the Owner, Owner's Architect, any Construction Manager, any laboratories, and the IOR to meet the DSA Oversight Process requirements without delay or added costs to the Project.

Contractor shall be responsible for any additional DSA fees related to review of proposed changes to the DSA-approved construction documents, to the extent the proposed changes were caused by Contractor's wrongful act or omissions. If inspected work is found to be in non-compliance with the DSA-approved construction documents or the DSA-approved testing and inspection program, then it must be removed and corrected. Any construction that covers unapproved or uninspected work is subject to removal and correction, at Contractor's expense, in order to permit inspection and approval of the covered work in accordance with the DSA Oversight Process.

19. FORCE MAJEURE. The Parties shall be excused from performance thereunder during the time and to the extent that they are prevented from obtaining, delivering or performing by act of God, fire, strike, loss or shortage of transportation facilities, lockout, or commandeering of materials, products, plants, or facilities by the Government when satisfactory evidence thereof is presented to the other Party, provided that it is satisfactorily established that the nonperformance is not due to the fault or neglect of the

Party not performing. A Contractor seeking an extension of time as a result of the above enumerated acts, must present the request for an extension of time to the Owner within fifteen (15) calendar days of the commencement of the act causing the delay. A Contractor's failure to provide notice of a request for an extension of time may result in denial of the request.

20. INDEMNIFICATION. To the fullest extent permitted by law, the Contractor and its Subcontractors shall defend and indemnify the Owner, any construction manager, Architect, Architect's consultants, the Inspector of Record, the State of California, and their respective agents, employees, officers, volunteers, Governing Boards, members of the Governing Boards, and directors ("Indemnitees"), from and against claims, actions, liability, damages, losses, and expenses (including, but not limited to, attorneys' fees and costs including fees of consultants) alleged by third parties arising out of or resulting from performance of the work by Contractor or its subcontractors; or any act, omission, negligence, or willful misconduct of the Contractor or its subcontractors or their respective agents, employees, material or equipment suppliers, invitees, or licensees but only to the extent caused in whole or in part by the acts or omissions of the Contractor, its subcontractors, its suppliers, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a Party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to a Party, person, or entity described in this paragraph. This obligation to defend and indemnify includes any claims or actions by third parties arising out of or resulting from Labor Code Section 2810. Contractor and its subcontractors shall have no obligation to defend or indemnify the Indemnitees against claims, actions, damages, liabilities, losses, and expenses caused by the active negligence, sole negligence or willful misconduct of Indemnitees. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the Contractor and its subcontractors. The scope of Consultant's duty to indemnify also includes losses arising from or otherwise related to exposure to COVID-19.

In the event Contractor brings hazardous materials on the Project site, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the Owner for any additional costs incurred as a result of Contractor's generation of hazardous material on the Project site. In addition, the Contractor shall defend and indemnify the Indemnitees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site, except to the extent the claims, damages, losses, costs, or expenses were caused by Indemnitees' active negligence, sole negligence or willful misconduct.

21. ASSUMPTION AND WAIVER. In providing the Services, Consultant agrees to follow all local, state, and federal guidelines regarding human protection from COVID-

19, including but not limited to social distancing, face coverings, and health screening. Consultant assumes all risks, known and unknown, as a result of the Services, including risks from the Coronavirus. To the fullest extent permitted by law, Consultant releases District, its governing board, members of its governing board, agents, officers, and employees, from and against all claims and causes of action, for any injury or harm of any kind which may arise from the Services, including the risks from COVID-19

22. INSURANCE.

a. **Comprehensive General Liability and Automobile Insurance.** Without limiting Contractor's indemnification, it is agreed that Contractor shall maintain in force at all time during the performance of this Agreement the policies of insurance hereinafter described. Contractor shall secure and maintain in force during the term of this Agreement a comprehensive general liability and automobile policy utilizing an occurrence policy form, with combined single limits of One Million dollars (\$1,000,000) or One Million dollars (\$1,000,000) per person, One Million dollars (\$1,000,000) per accident. Property damage limits shall be One Million dollars (\$1,000,000) per loss. The Owner shall be named as an additional insured on the policies by endorsements that shall be attached to the Agreement as proof of insurance. Contractor shall produce the policy for Owner at Owner's request.

Written notification by the carrier to the Owner at least thirty (30) days prior to cancellation, failure to renew, or other termination, is required.

Certificates of insurance shall clearly state that the Owner is named as an additional insured under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by Owner and any other insurance carried by the Owner with respect to the matters covered by such policy be excess and non-contributing.

Contractor will, at its own expense, maintain coverage in conformance with above requirements. Certificates of insurance evidencing the existence of coverage shall be filed with the Owner prior to commencement of work.

b. **Workers' Compensation.** Contractor shall maintain a policy of workers' compensation insurance as required by Labor Code Section 3200 *et seq.* during the duration of this Agreement. Contractor shall waive all rights of subrogation against Owner for loss arising from work performed under this Agreement. A certificate evidencing this coverage shall be filed with the Owner prior to the commencement of work under this Agreement. Notification by the carrier to the Owner at least thirty (30) days prior to cancellation, failure to renew, or other termination, is required.

c. **Builder's Risk.** Unless provided by the Owner at Owner's sole discretion, Contractor, during the progress of the work and until final acceptance of the work by Owner upon completion of the entire Contract, shall maintain Builder's Risk/Course-of-Construction insurance satisfactory to the Owner, issued on a completed value basis on

all insurable work included under the Contract Documents. This insurance shall insure against all risks, including but not limited to the following perils: vandalism, theft, malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, explosion, collapse, flood, earthquake (for projects not solely funded through revenue bonds, limited to earthquakes equivalent to or under 3.5 on the Richter Scale in magnitude), wind, hail, lightning, smoke, riot or civil commotion, debris removal (including demolition) and reasonable compensation for the Architect's services and expenses required as a result of such insured loss. This insurance shall provide coverage in an amount not less than the full cost to repair, replace or reconstruct the work. Such insurance shall include the Owner, the Architect, and any other person or entity with an insurable interest in the work as an additional named insured.

The Contractor shall submit to the Owner for its approval all items deemed to be uninsurable under the Builder's Risk/Course-of Construction insurance. The risk of the damage to the work due to the perils covered by the Builder's Risk/Course-of-Construction insurance, as well as any other hazard which might result in damage to the work, is that of the Contractor and the surety, and no claims for such loss or damage shall be recognized by the Owner, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

23. WARRANTY PERIOD. The Contractor shall promptly correct any work found not to be in conformance with the Contract Documents for one year after Owner's written acceptance of the work. Contractor shall correct the work promptly, and passage of the applicable warranty period shall not release Contractor from its obligation to correct the work if Owner provided the written notice within the applicable warranty period. Contractor's obligation to correct the warranty item continues until the correction is made. After the correction is made to Owner's satisfaction, a new warranty period of the same length as the original warranty period shall run on the corrected work. The obligations under this section shall survive acceptance of the work under the Contract and termination of the Contract.

24. ASSIGNMENT OF ANTI-TRUST CLAIM. Pursuant to Government Code Section 4552, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the Parties. If the Owner receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with section 4550) of Division 5 of Title 1 of the Government Code, the assignor may, upon demand, recover from the Owner any portion of the recovery, including treble damages, attributable to overcharges that were paid by the

assignor but were not paid by the Owner as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

25. SUBSTITUTIONS. No substitutions of materials from those specified in this Agreement or the specifications shall be made without prior written approval of the Owner.

26. SUPERVISION AND OWNER ACCESS. Contractor shall provide competent supervision of all persons on the job site. Contractor shall allow Owner access to the site at all times.

27. CLEAN UP, PROTECTION OF WORK AND PROPERTY. Contractor shall maintain site in a clean and safe condition, including the daily removal of flammable material. The Contractor shall erect and properly maintain at all times, as required by conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warnings against hazards created by such features in the course of construction. In an emergency affecting life and safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from Owner, is permitted to act at its discretion to prevent such threatened loss or injury. If at Project completion, the site is not clean, Owner may clean the site and deduct the cost from the Contract Sum.

28. OCCUPANCY. Owner reserves the right to occupy buildings at any time before formal acceptance of contract completion and such occupancy shall not constitute final acceptance or approval of any part of the work covered by this Agreement, nor shall such occupancy extend the date specified for substantial completion of work.

29. ANTI-DISCRIMINATION. It is the policy of the Owner that there shall be no discrimination against any of Contractor's prospective or active employees engaged in the Project because of race, color, ancestry, national origin, sex or religious creed. Therefore, the Contractor agrees to comply with applicable federal and California laws including, but not limited to, the California Fair Employment and Housing Act. In addition, the Contractor agrees to require like compliance by all subcontractors employed on the Project by Contractor.

30. INDEPENDENT CONTRACTOR. While engaged in carrying out the terms and conditions of the Contract Documents, the Contractor is an independent contractor, and not an officer, employee, agent, partner, or joint venturer of the Owner.

31. TESTS AND INSPECTIONS. Tests, inspections, and approvals of portions of the work required by the Contract Documents will comply with Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

32. INDEPENDENT TESTING LABORATORY. The Owner will select and pay

an independent testing laboratory to conduct all tests and inspections, including shipping or transportation costs or expenses (mileage and hours). Selection of the materials required to be tested shall be made by the laboratory or the Owner's representative and not by the Contractor. However, if Contractor requests that the Owner use a different testing laboratory and Owner chooses to approve such request, Contractor shall pay any additional shipping or transportation costs or expenses (mileage and hours). If Owner pays such additional costs or expenses instead of Contractor, then Owner may invoice such costs or expenses to the Contractor or withhold such costs or expenses from progress payments and/or retention.

33. ADVANCE NOTICE TO INSPECTOR OF RECORD. The Contractor shall notify the Inspector of Record a sufficient time in advance of its readiness for required observation or inspection so that the Inspector of Record may arrange for same. The Contractor shall notify the Inspector of Record a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector of Record may arrange for the testing of the material at the source of supply.

34. TESTING OFF-SITE. Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector of Record that such testing and inspection will not be required, shall not be incorporated in the work.

35. ADDITIONAL TESTING OR INSPECTION. If the Inspector of Record, the Architect, the Owner, or public authority having jurisdiction determines that portions of the work require additional testing, inspection, or approval not included under Section 30, the Inspector of Record will, upon written authorization from the Owner, make arrangements for such additional testing, inspection, or approval. The Owner shall bear such costs except as provided in Section 43.

36. COSTS FOR RETESTING. If such procedures for testing, inspection, or approval under Sections 30, 31, 32, and 34 reveal failure of the portions of the work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the Owner, invoiced to the Contractor, and, among other remedies, can be withheld from progress payments and/or retention.

37. COSTS FOR PREMATURE TEST. In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the Owner for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Architect's fees and expenses, and the amount of the invoice can among other remedies, be withheld from progress payments and/or retention.

38. TESTS OR INSPECTIONS NOT TO DELAY WORK. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the work.

39. TRENCHES OR EXCAVATIONS GREATER THAN FOUR FEET BELOW THE SURFACE. Pursuant to Public Contract Code Section 7104, when any excavation or trenching extends greater than four feet below the surface:

The Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, if any:

(1) Material that the Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code Section 25117, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.

(2) Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.

(3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

The public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the public entity and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from the Completion Date provided for by the Contract Documents, but shall proceed with all work to be performed under the Contract Documents. The Contractor shall retain any and all rights provided either by the Contract Documents or by law which pertain to the resolution of disputes and protests between the contracting Parties.

40. EXISTING UTILITY LINES; REMOVAL, RELOCATION. Pursuant to Government Code Section 4215, the Owner assumes the responsibility for removal, relocation, and protection of utilities located on the site at the time of commencement of construction under this Agreement with respect to any such utility facilities which are not identified in this Agreement, the plans and specifications. The Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure

of the Owner to provide for removal or relocation of such utility facilities. Owner shall compensate the Contractor for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, removing or relocating such utility facilities, and for equipment necessarily idle during such work.

41. STORM WATER DISCHARGE PERMIT. If applicable, the Contractor shall file a Notice of Intent to comply with the terms of the general permit to discharge storm water associated with construction activity (WQ Order No. 920-08-DWQ). The Notice of Intent must be sent to the following address along with the appropriate payment (warrant to be furnished by the Owner upon request by the Contractor, allow warrant processing time.): California State Water Resource Control Board, Division of Water Quality, Storm Water Permit Unit, P.O. Box 1977, Sacramento, California 95812-1977. The Contractor may also call the State Water Board's Construction Activity Storm Water Hotline at (916) 657-1146. The Notice of Intent shall be filed prior to the start of any construction activity.

42. DISCOVERY OF HAZARDOUS MATERIALS. In the event the Contractor encounters or suspects the presence on the site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by California Health and Safety Code Section 25249.5, which has not been rendered harmless, the Contractor shall immediately stop work in the area affected and report the condition to the Owner in writing, whether or not such material was generated by the Contractor or the Owner. The work in the affected area shall not thereafter be resumed, except by written agreement of the Owner and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous material, and has not been rendered harmless. The work in the affected area shall be resumed only in the absence of asbestos, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the Owner and the Contractor.

43. PROVISIONS REQUIRED BY LAW DEEMED INSERTED. Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to be inserted herein and this Agreement shall be read and enforced as though it were included therein.

44. MISCELLANEOUS PROVISIONS.

44.1 **Assignment.** The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on any payment bond, the surety on any performance bond and the Owner.

44.2 **Binding Effect.** This Agreement shall inure to the benefit of and shall be binding upon the Contractor and Owner and their respective successors and assigns.

44.3 **Severability; Governing Law; Choice of Forum.** If any provision of this Agreement shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof. The Contract shall be governed by the laws of the State of California. Any action or proceeding seeking any relief under or with respect to this Agreement shall be brought solely in the Superior Court of the State of California for the County of Placer, subject to transfer of venue under applicable State law, provided that nothing in this Agreement shall constitute a waiver of immunity to suit by Owner.

44.4 **Amendments.** The terms of the Contract Documents shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by both Parties and approved or ratified by the Governing Board.

44.5 **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of California and venue shall be in the appropriate Superior Court in Placer County, California.

44.6 **Written Notice.** Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the company or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified or overnight mail to the last business address known to the person who gives the notice. Owner shall, at Contractor's cost, timely notify Contractor of Owner's receipt of any third party claims relating to this Agreement pursuant to Public Contract Code Section 9201.

44.7 **Entire Agreement.** The Contract Documents constitute the entire agreement between the Parties relating to the Project, and supersedes any prior or contemporaneous agreement between the parties, oral or written, including the Owner's award of the Project to Contractor, unless such agreement is expressly incorporated herein. The Owner makes no representations or warranties, express or implied, not specified in the Contract. The Contract is intended as the complete and exclusive statement of the parties' agreement pursuant to Code of Civil Procedure Section 1856. Contractor, by the execution of this Agreement, acknowledges that Contractor has read this Agreement, understands it, and agrees to be bound by its terms and conditions.

44.8 **Execution of Other Documents.** The Parties to this Agreement shall cooperate fully in the execution of any and all other documents and in the completion of any additional actions that may be necessary or appropriate to give full force and effect to the terms and intent of this Agreement.

44.9 **Execution in Counterparts.** This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy, or an original, with all signatures appended together, shall be deemed a fully executed agreement.

Rocklin Unified School District,
a California Public School District

Contractor

By: _____

By: _____

Jennifer Stahlheber
Name

Name

Its: Deputy Superintendent,
Business & Operations

Its: _____

Date: _____

Date: _____

CALIFORNIA CONTRACTOR'S
LICENSE NO.

LICENSE EXPIRATION DATE

NOTE: Contractor must give the full business address of the Contractor and sign with Contractor’s usual signature. Partnerships must furnish the full name of all partners and the Agreement must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Corporations must sign with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

For Internal Use Only:

Program/School/Department: _____

FUND RESC YEAR OBJT SO GOAL FUNC SCH BR LO2 LO3

--	--	--	--	--	--	--	--	--	--	--	--