suspension of work ordered in accordance with Section 8-1.05, "Temporary Suspension of the Work", of the Standard Specifications. The Engineer may withhold progress payments or order the suspension of construction operations without an extension of the contract time, if the Contractor fails to comply with the requirements of "Water Pollution Control" as determined by the Engineer.

All BMP repairs shall be implemented by the Contractor within 72 hrs.

At the direction of the Engineer the Contractor shall conduct monitoring, sampling and analysis, and report preparation for conformance with the Municipal Permit. The Contractor will not be compensated for sampling and analysis work due to the Contractor's failure to properly implement, inspect, maintain, and repair BMPs in conformance with the approved WPCP and any amendments thereto, or for failing to store construction materials or wastes in watertight conditions.

# Method of Payment

Payment for Water Pollution Control shall be considered as included in prices paid for the various contract items of work involved and shall include full compensation for the work performed, including obtaining Permit coverage, developing, preparing, revising, obtaining approval of, and amending the WPCP, implementing, installing, constructing, operating, maintaining, and removing and disposing of temporary BMPs, performing the observations, inspections, sampling, analysis, reporting, and street sweeping, and as specified in the Caltrans Handbooks, De Minimus Permit, Municipal Permit and these Special Provisions, and as directed by the Engineer.

# **STREET SWEEPING:**

The following special provision regarding "Street Sweeping" is being added to the contract document.

#### **GENERAL**

## **Summary**

This work includes street sweeping.

The WPCP shall describe and include the use of street sweeping as a Water Pollution Control practice for sediment control and tracking control. Street sweeping shall also conform to all applicable AQMD requirements.

#### **Submittals**

At least 5 working days before starting clearing and grubbing, earthwork, or other activities with the potential for tracking sediment or debris, submit:

- A. The number of street sweepers that will be used as described in the WPCP.
- B. Type of sweeper technology (or technologies).

# **Quality Control and Assurance**

Retain the following records related to street sweeping and submit weekly to Engineer:

- A. Tracking Inspection Log
- B. Sweeping times and locations.
- C. Quantity of sweeping waste disposal.

or

D. Sweeping by hand is acceptable in lieu of A, B, and C above.

#### CONSTRUCTION

# **Street Sweepers**

Sweepers must use one of these technologies:

- A. Mechanical sweeper followed by a vacuum-assisted sweeper.
- B. Vacuum-assisted dry (waterless) sweeper.
- C. Regenerative-air sweeper.

# Operation

Street sweeping shall be conducted at:

- A. Paved roads at job site entrance and exit locations.
- B. Paved areas within the job site that flow to storm drains or water bodies.

Street sweeping shall be conducted, and sweeper(s) shall be available to operate at all times, for the following:

- A. During clearing and grubbing activities.
- B. During earthwork activities.
- C. During trenching activities.
- D. During roadway structural section activities.
- E. When vehicles are entering and leaving the job site.
- F. After soil disturbing activities.
- G. After observing offsite tracking of material.

Contractor's Water Pollution Control Manager shall inspect adjacent paved areas at job site entrances and exits and paved roadways within the job site on a minimum daily basis, and more frequently when activities that require street sweeping are being performed. Contractor's Water Pollution Control Manager shall maintain a "Tracking Inspection Log." Street sweeping shall be conducted:

A. Within 1 hour, if sediment or debris is observed on paved areas or paved roadways.

At least one sweeper, in good working order, must be on the job site at all times when sweeping work may be required.

Perform street sweeping to minimize dust. If dust generation is excessive or sediment pickup is ineffective, water may be used but shall be contained, collected (e.g. vacuum), and properly disposed.

Material collected during street sweeping must be removed and disposed of under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way" of the Standard Specifications.

# Method of Payment

Full compensation to conform with the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved including furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in street sweeping, including disposal of collected material, as shown on the plans, as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer. Therefore, no additional compensation will be allowed for street sweeping.

# TRAFFIC CONTROL SYSTEM/ PUBLIC CONVENIENCE/ PUBLIC SAFETY:

Traffic controls, including but not limited to, vehicular and pedestrian traffic controls, maintenance of vehicular and pedestrian access, detours, and street closures shall be in accordance with the Special Provisions, Traffic Control Plans, the current "Manual on Uniform Traffic Control Devices," and Subsection 7-10, of the current "Standard Specifications for Public Works Construction," including all its subsequent amendments. Nothing in the Special Provisions shall be construed as relieving the Contractor from his or her responsibility to provide for the safety and convenience of traffic and the public during construction.

In the event of conflict, the order of precedence shall be as follows:

- 1. Special Provisions
- 2. Traffic Control Plans
- 3. Manual on Uniform Traffic Control Devices (MUTCD)
- 4. Standard Specifications

Traffic Control shall be in accordance with the following Special Provisions:

- a. All major streets shall remain open to through traffic at all times; unless, when they are being slurry sealed, then use Traffic Control for partial opening. The Contractor shall provide a smooth travel way and either a flagger and/or traffic control signage to direct the traveling public around the work zone during temporary street closures when slurry applications are occurring on the Project. Local streets shall be closed to traffic only as long as it takes for material application and drying time.
- b. The Contractor shall be responsible for the preparation of Traffic Control Plans as necessary for the work. The Traffic Control Plans shall indicate the traffic control requirements for the different types of work to be performed and be signed and stamped by a California Registered Traffic Engineer and transmitted to the County for approval no later than fourteen (14) calendar days prior to the scheduled commencement of work. Comments and corrections shall be returned to the Contractor within five (5) working days. The Traffic

- Control Plans shall conform to the requirements listed in these Technical Provisions, the Manual on Uniform Traffic Control Devices, and the Standard Specifications.
- c. All traffic controls and safety devices, equipment and materials, including but not limited to cones, channelizers, delineators, flashing warning lights, barricades, high level warning devices (telescoping flag trees), flags, signs, markers, portable barriers, temporary railing (Type-K), temporary fencing, flashing arrow signs, changeable message sign, markings, and flagging equipment shall be provided and maintained by the Contractor in "like new" condition.
- d. The Contractor shall furnish and properly install, construct, erect, use and continuously inspect and maintain, twenty-four (24) hours per day, seven (7) days per week, which includes holidays, all said devices, equipment and materials and all temporary and permanent pedestrian and driving surfaces as necessary to provide for the safety and convenience of, and to properly warn, guide, control, regulate, channelize and protect the vehicular traffic, pedestrian traffic, project workers, and the public throughout the entire limits of the work activity and beyond said limits as necessary to include areas affecting or affected by the work, from the date of Notice to Proceed to the completion and acceptance of the work.
- e. High-level warning devices (telescoping flag trees) are required at all times for work being performed within the roadway unless otherwise specifically approved by the Engineer.
- f. All barricades shall be equipped with flashing warning lights, and all traffic cones shall be no less than 711mm (28") in height, except that shorter cones, 305 mm (12") minimum height, may be permitted during striping maintenance operations where the only function of the cone is to protect the wet paint from the traffic. The entire area of orange and white stripes for barricades shall be Type I, engineering grade, or Type II, super engineering grade, retroreflective sheeting conforming to the requirements of ASTM Designation: D 4956-95.
- g. Type III barricades, no less than 1.83 m (6') in length and equipped with two (2) Type "N" markers each and two (2) portable flashing beacons each, shall be used to close streets, except as otherwise specifically approved by the Engineer for minor maintenance work of no more than one (1) working day's duration, on weekdays, or on holidays only, and limited to the hours between 7:00 a.m. and 2:00 p.m. Said barricades shall be placed across the full roadway at each point of closure with the distance between barricades, or between barricades and curbs, not exceeding 914 mm (3') except that one (1) 3.3 m (11') wide gap between barricades shall be provided at the center of the street. Barricades to the right of the street's center, facing the inbound vehicular traffic, shall also be equipped with one (1) Type C2 "Road Closed" sign, one (1) Type C3A, "Road Closed to Thru Traffic," sign, and a Type P warning sign.
- h. Except as otherwise approved by the Engineer, two-way vehicular traffic shall be maintained at all times within two (2) eleven-foot (11') wide lanes on streets having an effective roadway width of 44' or more with restricted parking. Other streets of lesser widths may be reduced to one (1) twelve foot (12') wide lane with work activity being limited to one side at a time and one-way vehicular traffic being maintained at all times by properly trained and experienced flaggers.

No reduction of the traveled way width shall be permitted on any County street before 8:00 a.m. or after 5:00 p.m., or on weekends or holidays, or when active work is not being done, unless otherwise approved by the Engineer.

# Arrow boards shall be required for all lane closures on arterial and collector streets.

- i. Properly trained and experienced flaggers shall be provided to direct traffic when said traffic is to be interrupted, when two-way traffic is to be reduced to one-way traffic, and at other such times as is necessary to safely pass traffic through or around the work area and when so directed by the Engineer.
- j. Vehicular access to occupied residential property may be restricted on weekdays, other than holidays, between the hours of 8:00 a.m. and 2:00 p.m. while essential work activity is taking place, providing the Contractor gives the property owner or resident at least forty-eight (48) hour advance written and oral notice. See Part 2, "Notification of Residents," herein.

Convenient and safe pedestrian access to occupied residential and business property shall be maintained at all times. Access to mailboxes shall be maintained at all times such that the postal delivery service is not interrupted.

Access to vacant and unused property may be restricted at the Engineer's discretion. Both vehicular and pedestrian access shall be maintained at all times to all other property except as otherwise specifically authorized in writing by the County's Engineer.

- k. Traffic control and safety devices and equipment being used that becomes damaged, destroyed, faded, graffitied, encrusted, soiled, misplaced, worn out, inoperative, lost, or stolen shall be promptly repaired, refurbished, or replaced. Traffic control and safety devices and equipment being used, that is displaced or not in an upright position from any cause, shall be promptly returned or restored to their proper position.
- 1. An unobstructed view of all signs and warning devices including, but not limited to, stop signs, stop ahead signs, street name signs, and other regulatory, warning and construction signs, markers, and warning devices shall be maintained at all times. All speed limit signs shall be black on white with signs at either end of the project notifying the motoring public that fines are doubled in construction zones. No trucks or other equipment or materials shall be stopped, parked, or otherwise placed so as to obscure said signs, markers and devices from the view of the vehicular and pedestrian traffic to which it applies.
- m. When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall yield to said public traffic at all times, except where the traffic is being controlled by police officers, fire officers, properly trained and experienced flaggers, or at traffic signalized intersections.
- n. Stockpiling or storage of materials on any public right-of-way or parking area will not be allowed without the specific written permission of the Engineer. Materials spilled along or on said right-of-way or parking area shall be removed completely and promptly. All stockpile and storage areas shall be maintained in a safe, neat, clean, and orderly condition, and shall be restored to equal or better than original condition upon completion of the work.

- o. On projects involving work on, closure of, or partial closure of existing streets, and where vehicular access to the abutting property must be restricted, the work shall be so selected, arranged and scheduled that the person(s) requiring access to said abutting property and residents along said streets affected will be able to park within a reasonable distance typically the closest cross street or the cross street at the beginning of cul-de-sacs. In addition, no two adjoining streets shall be closed at the same time, except as otherwise approved by the Engineer. Residents must be given written notice of such restrictions a minimum of 48 hours in advance.
- p. When work has been completed on a particular street or has been suspended or rescheduled, and said street is to be opened to vehicular traffic, all equipment, "NO PARKING", "NO DRIVING" signs, other obstructions, and unnecessary traffic control devices and equipment shall be promptly removed from that street, except as otherwise approved by the Engineer.
  - When chip seal has been completed on a particular street and said street is to be opened to vehicular traffic, "LOOSE GRAVEL" signs shall remain in place until said street is applied with slurry seal.
- q. Should the Contractor be neglectful, negligent, or refuse, fail, or otherwise be unavailable to promptly, satisfactorily, and fully comply with the provisions specified and referred to herein above, the County reserves the right to correct or mitigate any situation, that in the sole opinion of the Engineer, constitutes a serious deficiency or serious case of noncompliance, by any means at its disposal at the Contractor's or permittee's expense, and shall deduct the cost therefore from the Contractor's progress or final payments. Such corrective action taken by the County shall not reduce or abrogate the Contractor's legal obligations and liability for proper traffic control and safety measures and shall not serve to transfer said obligations and liabilities from the Contractor to the County or the County's agents.
- r. Violations of any of the above Provisions or provisions of the referenced publications, unless promptly and completely corrected to the satisfaction of the Engineer, shall, at the sole discretion of the County, be grounds for termination of the Contract, or shut down or partial shut down of the work, without compensation to the Contractor or permittee, or liability to the County, all as prescribed by contractual obligation or State law, whichever is applicable.

# **Method of Payment**

Traffic control systems shall include but not be limited to, furnishing all labor (including flagging costs), materials (including construction area signs), tools, equipment, traffic control Plans and revisions, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the traffic control including lights, channelizers (surface mounted), temporary railing (Type K) markers, delineators, temporary striping and pavement marking, barricades, portable flashing beacons, flashing arrow signs, portable changeable message signs, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

Full compensation for compliance with the provisions specified and referenced herein above shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

## PORTABLE CHANGEABLE MESSAGE SIGN:

Two (2) portable changeable message signs shall be furnished, placed, operated, and maintained at locations shown on the plans or where designated by the Engineer and shall conform to the provisions in Section 12, "Construction Area Traffic Control Devices" of the Standard Specifications and these Special Provisions. Messages displayed on the portable changeable message signs shall be as specified on the plans, or as directed by the Engineer, and shall conform to Section 12 3.12 "Portable Changeable Message Signs" of the Standard Specifications and "Maintaining Traffic" of these Special Provisions".

A portable changeable message sign shall be placed in advance of the first warning sign for each stationary lane closure.

A portable changeable message sign shall be placed during speed zone reductions. When used in conjunction with a lane closure, use one portable changeable message sign, with both the speed zone reduction and the lane closure messages.

# **Method of Payment**

Full compensation for portable changeable message signs shall include all labor, materials, tools, equipment and incidentals, and for doing all work involved in furnishing, placing, operating, maintaining, repairing, transporting from location to location and removing portable changeable message signs as directed by the Engineer shall be considered as included in the various items of work and no additional compensation will be allowed therefor.

# NOTIFICATION OF RESIDENTS AND POSTING NO PARKING SIGNS:

At least five working days prior to commencing work, the Contractor shall submit his schedule to the County for approval. The Contractor shall give verbal notification, printed notifications (in English and Spanish languages) and copies of the weekly schedules to all firms, institutions, agencies, residents, utility companies which will be affected by the sealing applications at least fourteen (14) calendar days in advance of and on each occasion of said sealing application. Said firms, institutions, agencies and utility companies include, but are not limited to the following: schools, day care centers, postal service, hospitals, governmental services, Police Department, Fire Department, ambulance services, Transit Authority (Bus service), trash collection firms and County/Private street sweeping operations. Additional printed notifications (in English and Spanish languages) shall be given not less than forty-eight (48) hours prior to performing any work which will restrict property access, close or partially close the street, or which will restrict or disallow street parking or driving.

Coordination with the trash collection firms shall be done such that no street shall be slurried within two (2) days prior to trash collection. Damage occurring to slurry seal from trash trucks shall be repaired at the expense of the Contractor and per the direction of the Engineer. The Contractor is solely responsible for coordination with trash collection firms in scheduling all work and the bid submitted is acknowledgement that any and all scheduling issues have been considered herein, with no disruption of trash collection schedules.

The Contractor shall coordinate his work with all schools located within the slurry area and meet with said schools prior to the start of any work. All work adjacent to schools shall be completed on weekends or on the off schedule of the school that is impacted by the slurry program. Any additional costs associated with weekend work shall be included in the contract price and no additional compensation will be allowed.

Barricades shall have printed notices in large print indicating when the street will be slurried.

The printed handout notices shall contain a general description of the work to be done, the name of the street to be sealed with limits, the day and date of the sealing application, a statement that no on-street parking or driving on the new slurry surface will be allowed between the hours of 7:00 am and 5:00 pm on the day of work, reference to placement of barricades along the street two (2) days in advance of work, a statement that it will be necessary to tow away parked vehicles at the owner's expense per California Vehicle Code CVC 22651L and CVC 22654D; a statement that in the event the street is missed, it will be rescheduled in approximately 1-2 weeks and that the residents will be renotified; the statement that there will be no disruption of mail service or trash collection schedules, and the handout shall also include the name and telephone number of the Contractor.

In addition to the foregoing, the notices to residents shall contain a statement that the street to be sealed will be closed to vehicular traffic, and the suggestion that if they require the use of their vehicle on the day of the sealing work, they should consider parking their vehicles on a nearby street which is not scheduled for sealing application.

If, in the event a street scheduled for sealing was missed, the Contractor shall immediately remove all "NO PARKING", "NO DRIVING" signs and notify all residents and others previously notified, in person and with printed notices, that due to unforeseen circumstances, the Contractor was not able to seal the street as previously notified, that the street will be rescheduled in approximately 1 to 2 weeks, and that they will be renotified. The Contractor shall, on the job site prior to the start of each day's work, have an adequate supply of approved letters of notification to residents for missed streets.

The Contractor shall also post pre-approved printed "NO PARKING-TOW WAY" signs on 1" X 2" wood stakes and barricades at one hundred foot (100') maximum spacing along both sides of the street to be sealed and 'NO PARKING" signs at the street corners and at two hundred foot (200') maximum spacing along both sides of the street to be sealed, 48 hours prior to the start of the sealing work. The Contractor shall maintain said signs through the day of work, and shall start the removal of said signs by 4:00 p.m. and complete the removal by 5:00 p.m. on said day of work or as otherwise directed by the Engineer or called for in the preceding paragraph.

The Contractor shall document the day, date and time that the signs are installed because the no parking restriction cannot be enforced until the signs have been in place 24 hours.

Posting of signs on trees, utility poles, light standards and other existing parkway improvement is strictly forbidden.

The "NO PARKING" signs shall contain the day, date and hours that parking will be prohibited on that particular street and a statement that parked vehicles will be towed away at owner's expense per California Vehicle Code CVC 22651L and CVC 22654D.

All printed notices and no parking signs shall be submitted to the Engineer at least 12 calendar days before the first day of work.

Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefore.

## **COOPERATION AND COLLATERAL WORK:**

Cooperation shall be in accordance with Subsection 5-6, "Cooperation," and Subsection 7-7 "Cooperation and Collateral Work," of the Standard Specifications (Greenbook) and these Special Provisions.

The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous collateral, and essential work by others and coordinating with the work by others. The County, other contractors and utilities shall have the right to operate within or adjacent to the work site during the performance of such work.

Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to those limits, the Contractor shall cooperate with all the other contractors or other forces so that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

Each contractor shall be responsible to the other for all damages to work, to persons or property caused to the other by their operations, and for loss caused the other due to unnecessary delays or failure to finish the work within the time specified for completion.

The Contractor shall include in the bid all costs involved as a result of coordinating the work with others. The Contractor will not be entitled to additional compensation from the County for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall re-deploy its work force to other parts of the work.

Should the Contractor be delayed by the County, and such delay could not have been reasonable foreseen or prevented by the Contractor, the Engineer will determine the extent of the delay, the effect on the project, and any extension of time. Should any agency or utility company's work result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idled equipment or additional payments over and above the agreed upon unit price.

Compensation for compliance with all collateral work shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefore.

# PREPARING EXISTING ROADBED FOR SLURRY SEAL:

The surfaces shall be thoroughly cleaned, have herbicide applied and all weeds removed, and have the cracks sealed as defined in the Special Provisions.

Herbicide shall be applied prior to the crack sealing operation.

Before placing the sealing material, the pavement surface shall be cleaned by sweeping, or other means necessary to remove all loose particles of paving, all dirt, loose chips, and all other extraneous material.

Before commencing the sealing operations, all surface metal utility covers, survey monuments and survey markers which were uncovered shall be covered by thoroughly covering the surface with an appropriate adhesive and oiled or plastic paper. No adhesive material shall be permitted to cover, seal or fill the joint between the frame and cover of the structure. Covers are to be uncovered and cleaned by the end of the same work day. Ridges or bumps in the finished surface will not be permitted.

Sealing material shall be placed on all existing surfacing, including curve widening, public road connections, left turn pockets, and other adjacent asphalt surfaces, unless otherwise directed by the Engineer.

# **Method of Payment**

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

# **ROUT AND SEAL RANDOM CRACKS/FILL POTHOLES:**

All cracks will be filled with a rubberized asphalt material that has a minimum softening point temperature of 200° Fahrenheit and a safe heating temperature of 380° Fahrenheit, or as otherwise directed by the Engineer.

- 1. For cracks in size of 1/8 inch to 3/8 inch in width, the crack shall be widened using a router to form a sealant reservoir which is a minimum of 1/2 inch wide and 3/4 inch to 1 inch deep. The routed crack shall then be cleaned with hot compressed air to remove all dust and free moisture, and then sealed to service level. Pavement surfaces receiving the Chip seal will not require crack sealing for the crack size specified of 1/8 inch to 3/8 inch wide.
- 2. Cracks that are more than 3/8 inch but less than 3/4 shall be cleaned for the entire crack depth using sandblasting, brushing and hot air blowing techniques, as required to provide a

crack free from all debris, dust, loose material and moisture. Gauging or plowing may be required to remove incompressible deep in the crack. The clean crack shall be filled with sealant, from the bottom up to surface level, in a manner which does not result in sealant bridging or entrapped air pockets. With deep cracks, settlement of sealant may occur, thus requiring application of a second layer of sealant material. For cracks with depressed surfaces on each side of the crack shall be over filled beyond level with pavement surface and then squeezed to fill in depressed area. No more than a 2" wide and 1/16" thick strip of material may be applied to the pavement surface. The crack seal for the specified width of 3/8 inch to 3/4 inch shall apply to all pavement surfaces receiving the Chip seal and slurry seal (Type I or Type II).

- 3. Cracks wider than 3/4 inch and potholes shall be cleaned using sandblasting or other cleaning technique approved by the Engineer. The cracks and/or potholes shall then be filled with pea-gravel size hot mix asphalt concrete as directed by the Engineer. Filling cracks and potholes shall apply to all pavement surfaces receiving the Chip seal and slurry seal and Type I and Type II slurry seal.
- 4. No slurry seal material shall be placed until after the crack seal and/or fill material has been in place for a minimum of five (5) calendar days.

## **Method of Payment**

The contract unit bid price paid per lump sum for Rout and Seal Random Cracks/Fill Potholes shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals required for cracks routing, cracks cleaning, crack sealing, crack and pothole filling, sweeping and application of herbicide and sealant, as directed by the Engineer and no additional compensation will be allowed therefor.

# ASPHALT RUBBER HOT MIX - GAP GRADED (ARHM-GG) (Wet Process):

ARHM-GG, shall conform to the provisions for Type "A" asphalt concrete in Section 39, "Asphalt Concrete" of the Standard Specifications and these Special Provisions with the exception that ARHM-GG shall be spread at a temperature of not less than 285° F and not more than 350° F, measured in the hopper of the paving machine.

Binder for ARHM-GG shall be Type 2 asphalt-rubber binder with an asphalt modifier as specified in these Special Provisions.

The grade of asphalt-rubber binder shall be PG 70-10.

The asphalt modifier will be a resinous, high flash point, aromatic hydrocarbon compound and shall conform to the requirements following:

#### REQUIREMENTS FOR ASPHALT MODIFIER

Property	ASTM Test Method	Value
Flash Point, C.L.O.C., *0C (*0F)	D92	207 (405) min
Viscosity,cSt @ 100°C (212°F)	D445	X±3*
Molecular Analysis Asphaltenes, percent by mass Aromatics, percent by mass	D2007 D2007	0.1 max 55 min

<sup>\*</sup>The symbol "X" is the viscosity of the asphalt modifier the Contractor proposes to furnish. The value "X" which the Contractor proposes shall be between the limits of 19 and 36 and shall be submitted in writing to the Engineer. Any proposed change requested by the Contractor in the value "X" shall require a new asphalt-rubber binder design.

The amount of asphalt-rubber binder to be added to the aggregate shall be between 6.7% and 8.7% by dry weight of the aggregate. The exact amount will be determined by the Engineer. The temperature of the aggregate at the time the asphalt-rubber binder is added shall be not more than  $350^{\circ}$  F.

Rubber for use in asphalt-rubber binder shall be free of loose fabric, wire and other contaminants except that up to 3% (by weight of rubber) calcium carbonate or tale may be added to prevent rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce foaming when blended with the hot asphalt.

A sample of the asphalt-rubber binder proposed for use on the project, consisting of four onequart cans, together with the proposed formulation of the binder shall be furnished to the Engineer at least two weeks before ARHM-GG pavement construction is scheduled to begin.

The method and equipment for combining the rubber and the asphalt shall be so designed and accessible that the Engineer can readily determine the percentage by weight for each material being incorporative into the mixture.

Equipment utilized in the production and proportioning of the asphalt-rubber binder shall include the following:

An asphalt heating tank with hot oil heat transfer to heat the asphalt to the necessary temperature before blending with the granulated rubber. This unit shall be equipped with a thermostatic heat control device.

A mechanical blender for proper proportioning and thorough mixing of the asphalt and rubber. This unit shall have both an asphalt totalizing meter (gallons or liters) and a flow rate meter (gallons per minute or liters per minute).

An asphalt-rubber storage tank equipped with a heating system to maintain the proper temperature of the binder and an internal mixing unit capable of maintaining a homogeneous mixture of asphalt and rubber.

An asphalt-rubber supply system equipped with a pump and metering device capable of adding the binder by volume to the aggregate at the percentage specified or ordered.

The equipment utilized in the manufacture of asphalt rubber binder shall keep the mix in a continuous blend state. The batch method is not acceptable.

The swell, moisture vapor susceptibility, and the stabilometer value requirement in Section 39-2.02, "Aggregate" of the Standard Specifications shall not apply to ARHM-GG.

Before opening a traffic lane to public traffic, when directed by the Engineer, a sand cover shall be spread uniformly over areas where ARHM-GG has been placed.

Sand shall be free from clay or organic material and shall be of such size that from 90% to 100% will pass a No. 4 sieve and not more than 5% will pass a No. 200 sieve.

Sand shall be spread at the approximate rate of from one to two pounds per square yard.

Traffic shall not be allowed on the ARHM-GG for at least one hour after final rolling operations have been completed.

Pneumatic tired rollers shall not be used to compact ARHM-GG.

The asphalt-rubber mixture shall not be used as a binder after it has been retained for more than 48 hours.

## Type 2 Asphalt-Rubber Binder

Type 2 asphalt-rubber binder shall be a uniform and reacted mixture of compatible paving grade asphalt, extender oil, and reclaimed vulcanized rubber.

Extender oil shall be a resinous, high flash point aromatic hydrocarbon conforming to the following:

Viscosity, SUS @ 100° F

(ASTM D 88)

Flash Point, COC, Degree F

(ASTM D 92)

Molecular Analysis (ASTM D 2007)

Asphaltenes, % by weight

Aromatics, % by weight

55 minimum

The asphalt and extender oil, when combined shall form a material that is chemically compatible with the rubber.

The rubber used in Type 2 asphalt-rubber binder shall be reclaimed vulcanized rubber and shall contain between 22 percent and 39 percent by weight, natural rubber when tested in accordance

with ASTM D 297. The rubber shall conform to the following grading when tested in accordance with ASTM C 136:

Sieve Size	Percentage Passing	
No. 8	100	
No. 10	98-100	
No. 16	45-75	
No. 30	2-20	
No. 50	0-6	
No. 100	0-2	

The rubber shall contain no particles longer than 3/16 inch in length.

The extender oil shall be added to the asphalt at a rate between 2 percent and 6 percent by weight of the asphalt, the exact amount shall be determined by the asphalt-rubber supplier. The asphalt shall be at a temperature of not less than 350° F nor more than 425° F when the extender oil is added.

The asphalt-extender oil blend and rubber shall be combined and mixed together in the blender unit to produce a homogeneous mixture.

The amount of rubber to be added to the asphalt-extender oil blend shall be 18 percent and 22 percent by weight of the total combined mixture of asphalt, extender oil, and rubber. The exact amount shall be determined by the asphalt-rubber supplier. The asphalt-extender oil blend shall be at a temperature of not less than 350°F nor more than 425°F when the rubber is added. After the material has reacted for at least 45 minutes, the asphalt-rubber shall be metered into the mixing chamber of the asphalt concrete production plant at the percentage specified or ordered.

The asphalt-rubber mixture shall be reacted for a minimum of 45 minutes from the time the rubber is added to the asphalt-extender oil blend. The temperature of the asphalt-rubber mixture shall be maintained between 375° F and 425° F during the reaction period.

The asphalt-rubber mixture shall possess the following physical property after the reaction period:

Asphalt-rubber shall consist of the following:

After reacting the PG 64-16, asphalt modifier and rubber, the asphalt-rubber binder shall conform to the following requirements:

Test Parameter	Specification Limits
Field Viscosity, Haake at 375° F in centipoise ASTM D 2669	1500-4000

Penetration, Cone at  $77^{0}$  F in 1/10 MM ASTM D 217  $45 \pm 25$ Resilience  $77^{0}$  F in percent rebound ASTM D 3407 18 Minimum Field Softening Point in degree F ASTM D 36  $145 \pm 20$ 

Contractor shall have available a Haake Viscometer conforming to ASTM D 2669.

The asphalt-rubber mixture after reaching the desired consistency shall not be held at temperatures over 375°F for more than 4 hours.

# **General Requirements**

The aggregate for ARHM-GG shall conform to the following grading and shall meet the quality requirements for "Type A" as specified in Section 39-2.02, "Aggregate" of the Standard Specifications.

For ½" maximum size aggregate, use the following grading:

Sieve <u>Size</u>	Limits of Proposed <u>Gradation</u>	Operating <u>Range</u>	Contract <u>Compliance</u>
3/4"		100	100
1/2"		90-100	90-100
3/8"	78-92	X <u>+</u> 5	X <u>+</u> 7
#4	28-42	$X\pm 5$	X <u>+</u> 7
#8	15-25	X <u>+</u> 4	X <u>+</u> 5
#30	5-15	X <u>+</u> 4	X <u>+</u> 5
#200		2-7	0-8

The Los Angeles Rattler requirement in Section 39-2.02, "Aggregate" of the Standard Specifications shall be amended to read "40 percent maximum loss at 500 revolutions".

ARHM-GG shall be spread at a temperature of not less than 285° F and not more than 350° F, measured in the hopper of the paving machine, with ambient temperature of not less than 55° F.

# Measurement

The mixture of ARHM-GG will be measured by the ton in the same manner specified for asphalt concrete in Section 39-8.01, "Measurement" of the Standard Specifications.

# **Method of Payment**

The contract price paid per ton for Asphalt Rubber Hot Mix shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing ARHM-GG complete in place, including header cutting as directed by the Engineer, furnishing and applying asphaltic emulsion (paint binder/tack coat), furnishing and spreading sand cover if directed by the Engineer, as shown on the plan, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

# **COMPENSATION ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS:**

The provisions of this section shall apply only to the following contract items:

ITEM CODE	ITEM
390137	Rubberized Hot Mix Asphalt-GG

The compensation payable for asphalt binder used in hot mix asphalt will be increased or decreased in conformance with the provisions of this section for paving asphalt price fluctuations exceeding 10 percent (Iu/Ib is greater than 1.10 or less than 0.90) which occur during performance of the work.

The adjustment in compensation will be determined in conformance with the following formulae when the item of asphalt concrete is included in a monthly estimate:

- A. Total monthly adjustment = AO
- B. For an increase in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (Iu/Ib - 1.10) Ib$$

C. For a decrease in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (Iu/Ib - 0.90) Ib$$

- D. Where:
- A = Adjustment in dollars per ton of paving asphalt used to produce asphalt hot mix asphalt rounded to the nearest \$0.01.
- Iu = The California Statewide Paving Asphalt Price Index which is in effect on the first business day of the month within the pay period in which the quantity subject to adjustment was included in the estimate.
- Ib = The California Statewide Paving Asphalt Price Index for the month in which the bid opening for the project occurred.

Q = Quantity in tons of asphalt binder that was used in producing the quantity of hot mix asphalt shown under "This Estimate" on the monthly estimate using the amount of asphalt binder determined by the Engineer.

The adjustment in compensation will also be subject to the following:

- A. The compensation adjustments provided herein will be shown separately on payment estimates. The Contractor shall be liable to the State for decreased compensation adjustments and the Department may deduct the amount thereof from moneys due or that may become due the Contractor.
- B. Compensation adjustments made under this section will be taken into account in making adjustments in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities" of the Standard Specifications.
- C. In the event of an overrun of contract time, adjustment in compensation for paving asphalt included in estimates during the overrun period will be determined using the California Statewide Paving Asphalt Price Index in effect on the first business day of the month within the pay period in which the overrun began.

The California Statewide Paving Asphalt Price Index is determined each month on the first business day of the month by the Department using the median of posted prices in effect as posted by Chevron, Mobil, and Unocal for the Buena Vista, Huntington Beach, Kern River, Long Beach, Midway Sunset, and Wilmington fields.

In the event that the companies discontinue posting their prices for a field, the Department will determine an index from the remaining posted prices. The Department reserves the right to include in the index determination the posted prices of additional fields.

The California Statewide Paving Asphalt Price Index is available on the Division of Engineering Services website at: <a href="http://www.dot.ca.gov/hq/esc/oe/asphalt\_index/astable.html">http://www.dot.ca.gov/hq/esc/oe/asphalt\_index/astable.html</a>.

# REMOVE THERMOPLASTIC PAVEMENT MARKINGS AND PAVEMENT MARKERS:

Grinding shall be used for the removal of thermoplastic traffic stripes, crosswalk and pavement markings for removal of objectionable material, and such removal operation is being performed within 10 feet of a lane occupied by public traffic, the residue including dust shall be removed immediately after contact between the sand and the surface being treated. Such removal shall be by wet abrasive blasting, hydro-blasting or vacuum blasting, and shall comply with AQMD regulations.

Pavement markings shall be removed by grinding a rectangular area, rather than just lettering or markings, so the old message cannot be identified.

Nothing in these Special Provisions shall relieve the Contractor from his responsibilities as provided in Section 7-1.09, "Public Safety" of the Standard Specifications.

Crosswalk lines and pavement markings shall be restored by the Contractor no earlier than five-calendar days and no later than ten-calendar days after the slurry application.

For the estimating purposes, the removal quantities will be approximately the same as the new striping and thermoplastic pavement markings and pavement markers quantities. Bidders are responsible for verifying their own quantities.

At Washington Street, Contractor shall remove existing striping and thermoplastic pavement markings and pavement markers at night time.

# **Method of Payment**

The lump sum contract price paid for Remove Thermoplastic Pavement Marking and Pavement Markers shall include full compensation, for furnishing all labor, materials, tools, equipment, and for doing all work involved in removing thermoplastic crosswalks, pavement markings and pavement markers, and no additional compensation will be allowed therefore.

# **TEST STRIPS:**

The Contractor shall construct test strips for evaluation by the Engineer.

Two test strips shall be placed for Type I and Type II slurry. Each test strip shall be 400 to 600 feet long and shall replicate the full production placement of the slurry. The Engineer will evaluate each completed test strip for 72 hours after traffic has been allowed on it to determine if the mix design and placement procedure are acceptable. If the mix design or the placement procedure is determined by the Engineer to be unacceptable, the test strips will be rejected. The Contractor shall make modifications to the mix design or procedure and new test strips shall be constructed. The new test strips will be evaluated by the Engineer as previously specified. Rejected test strips shall be at the Contractor's expense and shall be removed if so directed by the Engineer.

#### **Method of Payment**

Full compensation for furnishing all labor, materials, tools, equipment and incidentals required by the placing of Type I and Type II slurry test strips shall be considered as included in the price paid per ton for Slurry Seal Type I and Slurry Seal Type II and no additional compensation will be allowed therefor.

# **SLURRY SEAL (Type I and Type II):**

Slurry seal shall be performed in accordance with Subsections 203-5 and 302-4, "Emulsion-Aggregate Slurry," of the Standard Specifications for Public Works Construction (Green Book) 2009 edition. and noted herein as the Standard Specifications, and the following Provisions. The type of slurry aggregate used shall be the type designated in the Bid.

Modify the following - Subsection 203-5.2, "Materials" of the Standard Specifications;

- (2) Admixtures, such as Portland Cement or aluminum sulfate may be mixed into the slurry material to adjust the curing time such that the applied slurry can support vehicular traffic within 60 minutes.
- (5) Use of slag shall not be permitted.
- (6) Deliveries of aggregate and emulsion shall not be made without the engineer present. Emulsion is not to be transferred to an on-site storage tanker without the sieve test performed by the County.

Modify the first paragraph of Subsection 203-5.4, "Mix Design," of the Standard Specifications to include the following:

The Contractor shall submit a Mix Design for approval within fourteen (14) working days after the Board of Supervisors Approval/Award. The Contractor will receive a "Notice to Proceed with Construction" only after the Mix Design is approved. The Contractor shall provide materials for verification of the Mix Design. Periodically throughout the project, at the direction of the Engineer, the County will perform further testing as necessary to provide assurance of the Mix Design.

If the Contractor changes sources of material, i.e. aggregate and/or oil, a new Mix Design shall be resubmitted. The cost of all Mix Design retest and testing as a result of changes to the Mix Design shall be borne by the Contractor, and the amount due to the County for said retesting will be deducted from the Contractor's Progress Payments.

Modify the second paragraph of Subsection 203-5.4, "Mix Design," of Standard Specifications to read as follows:

The Contractor shall allow ten (10) working days prior to start of work for calibration and testing at a location designated by the Engineer. The County's testing laboratory will obtain field samples at the time of calibration for Extraction Test (ASTM D 2172), Consistency Test, Wet Track Abrasion Test (ASTM D 3910), a verification of the 60 minute set time previously specified. When the County's testing laboratory has determined that the field samples meet the requirements stipulated in these Specifications, the Engineer will notify the Contractor to start work. In the event that the product does not meet Specification, another testing and calibration date shall be set ten (10) day prior to the start of work for a complete retest of the product at the expense of the Contractor.

Modify the following Subsection 302-4.2.2, "Continuous-Flow Mixers," of the Standard Specifications to read as follows:

All slurry mixing machines shall be equipped with a Fines Feeder for the adding of cement or granular Aluminum Sulfate.

Modify the following Subsection 302-4.3.1, "General," Table 302-4.3.1 (A) of the Standard Specifications:

Slurry Seal	Min.	Max.
Type I	$ELT/1700 \text{ ft}^2$	$ELT/2000 ft^2$
Type II	ELT/1150 ft <sup>2</sup>	ELT/1350 ft <sup>2</sup>
Type I (over Chip Seal)	ELT/950 ft <sup>2</sup>	ELT/1150 ft <sup>2</sup>

The estimated quantity for slurry seal in the Bid Schedule were based on an application rate of 1850 SF/ELT for Type I and 1250 SF/ELT for Type II. The total areas in Slurry Seal Quantity Tables in the appendix, shall be considered as approximate only and no guarantee is made as to the accuracy.

Add the following to Subsection 302-4.3.1, "General" of the Standard Specifications:

The Contractor shall have two slurry trucks or machines and at least one additional mixer as a backup.

Prior to the beginning of slurry operations, the Contractor shall furnish, at no cost to the County, current licensed weigh master's certificates indicating the net weight capacity of the aggregate bin. The Contractor shall provide a drive upon scale at the project site or an alternate site approved by the County. The drive on scale shall show the net weight of the aggregate bin on each slurry machine before the machine and product will be approved for applying slurry on the project.

All slurry machines are to carry, at all times, a calibrated emulsion measuring stick. The emulsion measuring stick is to be calibrated in 10-gallon increments to the slurry machine it is used on. Emulsion measuring sticks from other slurry machines will not be allowed to measure the gallons of emulsions on the slurry machines they were not calibrate to. The emulsion measuring stick is to have the slurry machine number or identification permanently marked on the stick. The gallons of emulsion are to be measured with a calibrated emulsion measuring stick and recorded before leaving and after returning to materials site. Use of a slurry machine will not be allowed if it does not have a calibrated emulsion measuring stick.

The Contractor shall furnish prior to commencing work, a calibrated stick in 10-gallon increments to measure the oil in the trailer storage tanks in gallons. The measuring stick shall be calibrated to the trailer storage tank it is used on. The inspector shall check the oil in each load "in and out" and in the storage tanks at the beginning and end of each day to determine the amount of emulsion used for that day. Emulsion is not to be transferred from delivery tank to on-site storage tank before the County performs the sieve analysis on the emulsion. Aggregate used in the slurry shall not exceed a moisture content of four percent (4%) by weight of dry aggregate.

Contractor may not schedule more than 150 tons of slurry to be placed per day. Slurry may not be applied at more than 150 feet per minute. Contractor shall not run more than two slurry machines per day.

The Contractor shall provide a self propelled 10 ton pneumatic roller with a tire pressure of 50 PSI and equipped with a water spray system. The Contractor shall roll all the required streets the same day they are slurried. The Contractor will be responsible for proper scheduling of the work

such that the rolling can be properly done within the given time constraint. The cost of furnishing the roller and operator shall be included in the price paid for slurry seal.

Prior to storing aggregate on private property, the Contractor shall submit to the Engineer written permission from the property owner for such stockpiling. The County may provide a stockpile location at a County Facility if space is available. The stock pile of material at a County Yard requires prior approval from the County Maintenance Division and the Engineer. The County does not guarantee that space will be available at a County Yard for the stockpile of material for this Project. If the County Yard location is provided for the Project, the notice of termination and final pay estimate will not be processed until the County Facility has been restored to the prior condition before the contractor utilized the site.

Precautions shall be taken to ensure that stockpiles do not become contaminated with oversized rock, clay, silt, or excessive amounts of moisture. The stockpiles shall be kept in areas that drain readily. Segregation of the aggregate will not be permitted.

The stockpile areas shall be thoroughly cleaned of all excess material and left in a neat, orderly appearance upon completion of slurry operations in any area.

The Contactor shall protect the wet slurry from traffic at all times and if damaged or defaced, the Contractor shall repair said damage at no additional cost to the County.

The placement of slurry seal may be suspended with the concurrence of the Engineer due to unsuitable weather, temperature conditions, or other conditions that are considered unfavorable for the prosecution of the work. The Contractor shall immediately comply with the order of suspension by the Engineer, and work shall not be resumed until authorized by the Engineer.

If work cannot resume on the same day to completion as scheduled, then this work shall be rescheduled in one to two weeks and the residents notified that the work will not be done as scheduled and renotified of new work day promptly. All "NO PARKING", "NO DRIVING" signs must be promptly removed. No more than two (2) rescheduled streets shall be scheduled for the same day and they shall be the first order of work for that day.

The days during which the suspension of work is in effect due to unsuitable weather shall not be considered working days and the date of completion shall be extended to allow for work and notification.

In the event of a suspension of work, the Contractor shall remove all barricades, equipment and "No Parking" signs (if appropriate) upon the curing of the completed portion of slurry.

No adjustment of unit prices of any items shall be allowed due to a suspension of work as described above.

Replace the first and second paragraphs of Subsection 302-4.3.2, "Spreading," of the Standard Specifications with the following:

Prior to applying slurry seal, the Contractor shall clean, to the satisfaction of the Engineer, the street surface with a power sweeper, remove all R.P.M.'s including "Blue Dots", abrasive

grind completely all lane lines, street legends, crosswalks or other painted or thermoplastic surfaces. All abrasive grinding shall be flush with the existing surface and not cause indentations into the pavement. This is necessary to provide a good bonding surface for the slurry seal, as well as eliminate "ghosting" of the old striping and markings as the new slurry wears off over time.

It is anticipated that nuisance water, such as storm water runoff and irrigation water, will run in and across the right-of-way at various time throughout the period of construction. It shall be the responsibility of the Contractor, at their own expense, to provide for and protect the work from such water. In addition, the Contactor's responsibility shall include handling nuisance waters such that their operations do not cause them to damage existing improvements or properties adjacent to or near the site of work.

Slurry shall be applied when the atmospheric temperature is greater than 50°F but not more than 100°F.

The application of slurry shall not commence until after 8:00 a.m., and shall conclude at 2:00 p.m. unless other authorized by the Engineer. The slurry shall be sufficiently cured to be open to traffic by 5:00 p.m. The portions of streets to be slurried shall be closed from the time the application begins until the mixture as achieved sufficient set to be opened to traffic.

The slurry shall be applied in such a manner that no ripples or waves exist. If ripples or waves occur in the slurry during the application, the work shall cease and the Contractor shall correct the situation. The Contractor may use a drag to knock down ridges. If ripples or waves are not corrected to the Engineer's satisfaction, the street shall be reslurried at the Contractor's expense.

The Contractor shall, at the direction of the Engineer, repair the reseal to the entire street, or complete section thereof, as determined by the Engineer, which have not been sealed properly (includes areas that have failed to meet yield and mix design specifications) and completely. No compensation will be provided for slurry seal used in repair and reseal work.

Add the following to the third paragraph of the Subsection 302-4.3.2, "Spreading" of the Standard Specifications:

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

Surface oil and grease shall be removed or sealed with shellac or an equivalent material approved by the County before the application of the slurry seal. Full compensation for surface oil and grease removal shall be considered as included in the unit cost for slurry seal.

For all cul-de-sacs (the last 250' minimum), the Contractor shall roll the last 250' of dead-end streets and knuckle curves or as otherwise directed by the Engineer. Full compensation for rolling the slurry shall be considered as include in the unit cost for slurry seal.

The start and finish of slurry application shall be a straight line which, unless otherwise approved by the Engineer, shall be obtained by laying a strip of building paper or other material approved by the Engineer on the pavement surface. After application of slurry, the paper is to be removed leaving a straight edge. The entire street surface area shall be sealed the same day.

The grading of the combined aggregate and the percentage of emulsified asphalt shall conform to the requirements of Type I or TYPE II as specified in Subsection 203-5.3, of the Standard Specifications.

Asphalt emulsion shall be a <u>QUICK-SET ANIONIC OR CATIONIC EMULSIFIED ASPHALT</u> conforming to the requirements of Subsection 203-1.3, "Test Reports and Certification," and Subsection 203-3.2, "Testing Requirements" of the Standard Specifications.

The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of **two to two-and-one-half (2 to 2½)** parts to one-hundred (100) parts of emulsion by volume.

The Contractor is hereby advised that County streets, parking lots, or other County-approved property will not be allowed as a site for stockpiling and batching. Arrangements for an acceptable site shall be the sole responsibility of the Contractor. Exception: Stockpiling will be allowed at the County Yard, located at 15670 Perris Boulevard, after arrangements are made with the County's Maintenance and Operations Division, at (909) 413-3160.

The Contractor shall sweep any raveled material on the street one (1) week after the initial placement. One additional sweeping shall occur (1) month after the first initial sweeping or as directed by the Engineer. If the Engineer determines the raveling is excessive, the frequency of sweeping shall be adjusted to the field conditions of the raveling. If excessive raveling, as determined by the Engineer, continues after two (2) weeks of the initial placement, the street shall be swept and reslurried with a Type I mixtures (Local Streets) or a Type II (Arterial/Collector Streets) at no cost to the County.

The Contractor shall remove any and all weeds that are growing through cracks from the project street located within the pavement or growing between the concrete gutter and the pavement and spray a herbicide mixture of either Hyvar mixed with Roundup or Pramatol mixed with Roundup, or approved equal, at least ten (10) working days prior to slurring. The herbicide mixture shall contain Blazon, or approved equal, a purple dye to easily confirm the herbicide has been applied. The work shall be approved by the Engineer or his representative prior to slurrying. Full compensation for plant removal and herbicide treatment shall be considered as included in the unit cost for slurry seal.

The Contractor shall supply the County with licensed weighmaster's certificates of weight for all delivered aggregates to the job during the course of each day. Aggregate shall be delivered to the project only in the presence of a County representative. The Contractor shall also present weighmaster certificates for the amount of such aggregate remaining at the completion of the project at no cost to the County. Payment shall be determined by the amount that is physically placed, which cannot exceed the amount that is delivered to the job site with the certified weighmaster tickets. There shall be no outside work done utilizing materials from the tanks or stockpiles stored for the County's Contract.

# **Method of Payment**

Payment for slurry seal conform to the provisions of Subsection 302-4.5, entitled "Measurement and Payment," of the Standard Specifications for Public Works Construction and shall include payment in full for all work called for in this Article. The unit of measure, as shown in the Proposal, is to be "extra long ton" and shall be paid for by the extra long ton (ELT).

Full compensation for developing a water supply, for furnishing and placing all water required for work done in the Contract, including extra work shall be included in the prices paid for the various items of work requiring water; and no separate payment will be made therefore.

# **MICROSURFACING:**

## **GENERAL**

Microsurfacing shall consist of mixing a microsurfacing emulsion (MSE), water, additives, mineral filler, and aggregate; and spreading the mixture on a pavement surface as shown on the Plans.

#### **MATERIALS**

Microsurfacing Emulsion (MSE). MSE shall be a quick-traffic, homogeneous, polymer-modified, cationic asphalt emulsion. MSE shall conform to the requirements specified in AASHTO M208 or ASTM D2397 for CSS-1h and the table below. The cement mixing test shall be waived for MSE.

Microsurfacing Emulsion

Test	Test Method	Requirement
Viscosity @ 25°C, SSF	AASHTO T 59	15-90 sec
Sieve Test, max.	AASHTO T 59	0.30%
Settlement, 5 days, max.	ASTM D 244	5%
Storage Stability, 1 day, max.	AASHTO T 59	1%
Residue by Evaporation, min.	California Test 331	64 %
Tests on Residue:		
·Test	Test Method	Requirement
G* @ 20°C, 10 rad/sec, MPa	AASHTO TP 5	Report Only
Penetration @ 77°F (25°C)	AASHTO T 49	40-90
Phase Angle @ 50°C, 10 rad/sec,	AASHTO TP 5	Report Only
PA (max) - PA base		10.500 (550.5)
Softening Point, min.	AASHTO T 53	135°F (57°C)
Stiffness @ -12°C, MPa, and M-value	AASHTO TP 1	Report Only

Polymers shall be milled or blended into the asphalt or blended into the emulsifier solution prior to the emulsification process. MSE shall contain a minimum of 3 percent polymer solids based on the weight of residual asphalt and shall be certified by the MSE supplier.

The 5-day settlement test may be waived, provided MSE stored for use on the Work site is used within 36 hours from the time of shipment.

A Certificate of Compliance conforming to 6-1.07 shall be furnished with each shipment of MSE and submitted to the Engineer.

#### Water and Additives

Water shall be potable, free of harmful soluble salts, reactive chemicals, and any other contaminants, and of such quality that the asphalt will not separate from the MSE before the microsurfacing mixture is placed.

If necessary for workability, liquid additives that will not adversely affect the microsurfacing mixture may be used if so approved by the Engineer.

#### Mineral Filler

Mineral filler shall be non-air entrained portland cement or hydrated lime that is free of lumps. Portland cement shall be Type I, Type II, Type III or a combination thereof. The type of mineral filler shall be determined by the Contractor based on laboratory mix designs. Mineral filler will be considered part of the aggregate gradation requirement. An increase or decrease of 1 percent may be approved by the Engineer if necessary for better consistency or set times.

## Aggregate

Aggregate shall be free from vegetable matter and other deleterious substances, lumps and oversize particles.

Aggregate shall conform to the grading and quality requirements prior to the addition of the MSE. If aggregates are blended, each component aggregate shall conform to the sand equivalent and durability index requirements.

The percentage composition by weight of aggregate, including mineral filler, shall conform to the following table.

Aggregate Grading
TVPE III

1 1 1 2 1 1 1		
Sieve Sizes	Percentage Passing	
3/8 (9.5 mm)	100	
#4 (4.75 mm)	70 – 90	
#8 (2.36 mm)	45 – 70	
#16 (1.18 mm)	28 – 50	
#30 (600 μm)	19 – 34	
#200 (75 μm)	5 – 15	

The aggregate, excluding mineral filler, shall conform to the requirements shown in the table below.

**Aggregate Quality** 

Test	California Test	Requirement
Sand Equivalent, min.	217	65
Durability Index, min.	229	55
Percentage of Crushed Particles, min. <sup>1</sup>	205	100%
Los Angeles Rattler Loss at 500 Rev., max. <sup>2</sup>	211	35%

#### Notes:

- California Test 205, Section D, is amended to read: "Any particle having 2 or more freshly, mechanically fractured faces shall be considered a crushed particle."
- California Test 211, Los Angeles Rattler, shall be performed on the parent aggregate before crushing

If the results of the aggregate grading do not meet the specified gradation, the in-place microsurfacing represented by the test shall be removed. However, if requested in writing by the Contractor and approved by the Engineer, the microsurfacing may remain in place and the Contractor shall pay to the County \$2.00 per ton for the aggregate represented by the tests and left in place. The County may deduct these amounts from any moneys due or to become due the Contractor.

If the results of the sand equivalent test for aggregate do not meet the specified requirement, the in-place microsurfacing represented by the test shall be removed. However, if requested in writing by the Contractor and approved by the Engineer, the microsurfacing may remain in place and the Contractor shall pay to the County \$2.00 per ton for the aggregate represented by the tests and left in place. The County may deduct these amounts from any moneys due or to become due the Contractor.

When the results of both the aggregate grading and the sand equivalent tests do not conform to the specified requirements and if the microsurfacing is allowed to remain in place, both payments to the County shall apply. The County may deduct these amounts from any moneys due or to become due the Contractor.

No single aggregate grading or sand equivalent test shall represent more than 275 tons or one day's production, whichever is smaller.

MIX DESIGN The Contractor shall submit a laboratory report of tests and a proposed mix design covering the specific materials proposed for use on the Work. The component materials used in the mix design must be the same materials that will be used during microsurfacing placement. If the mix design consists of the same materials covered by a previous laboratory report, the previous laboratory report may be submitted and shall include material testing data performed within the previous 12 months. If requesting substitute materials, a new laboratory report and mix design shall be submitted at least 10 days before starting placement.

The percentages of each individual material proposed in the mix design shall be shown in the laboratory report. Adjustments may be required during construction based on field conditions. Individual materials shall be within the limits shown in the table below.

**Mix Design Proportion Limits** 

MSE Residual	5.5% to 10.5% by dry weight of aggregate
Asphalt	
Water and	No Limit
Additives	
Mineral Filler	0% to 3% by dry weight of aggregate

The mix designs and aggregate tests shall be performed by a laboratory capable of performing the applicable International Slurry Surfacing Association (ISSA) tests. The proposed microsurfacing mixtures shall conform to the specified requirements when tested in conformance with the tests shown in the following table.

Mix Design Tests

Mix Design Tests		
Test	ISSA Test Method	Requirements
Wet Cohesion	TB* 139	
@ 30 Minute (Set), min.		12 kg-cm
@ 60 Minute (Traffic), min.		20 kg-cm
Excess Asphalt, max.	TB* 109	$50 \text{ g/ft}^2 (540 \text{ g/m}^2)$
Wet Stripping, min.	TB* 114	Pass (90% Minimum)
Wet Track Abrasion Loss	TB* 100	_
6-day Soak, max.		$75g/ft^2 (810 g/m^2)$
Displacement	TB* 147A	
Lateral, max.		5%
Specific Gravity After 1000 Cycles		
of 125 lbs (57 kg), Max.		2.10
Classification Compatibility, min.	TB* 144	(AAA, BAA) 11 Grade Points
		Minimum
Mix Time @ 77°F, min.	TB* 113	Controllable to 120 Seconds
		Minimum

TB\* = Technical Bulletin

The laboratory that performed the tests and designed the mixtures shall sign the laboratory report. The report shall show the results of the tests on individual materials and shall compare their values to those required by these Special Provisions. The report shall clearly show the proportions of aggregate, water (minimum and maximum), additive usage, mineral filler (minimum and maximum), and MSE residual asphalt content (minimum and maximum) based on the dry weight of aggregate. The laboratory shall report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect) in conformance with the requirements of ASTM C29M. Previous laboratory reports covering the same materials may be accepted provided the material test reports were completed within the previous 12 months. The mix design shall further show the recommended changes in water, additive, and mineral filler proportions for high temperature weather conditions by reporting proportions of materials required for 60 seconds of mix time with materials heated to 100°F.

The component materials used in the mix design shall be representative of the microsurfacing materials proposed by the Contractor for use on the Work.

Once the mix design is approved by the Engineer, no substitution of other material will be

permitted unless the materials proposed for substitution are first tested and a laboratory report is submitted for the substituted design in conformance with these special provisions. Substituted materials shall not be used until the mix design for those materials has been approved by the Engineer.

The completed mixture, after addition of water and additives, if additives are used, shall be such that the microsurfacing mixture has proper workability. At the expiration of the time allowed for closure of lanes, the microsurfacing mixture shall be sufficiently cured to support unrestricted traffic.

# **Proportioning**

Aggregate, water, additives (if used), mineral filler, and MSE shall be proportioned by volume utilizing the mix design approved by the Engineer. If more than one kind of aggregate is used, the correct amount of each kind of aggregate to produce the required grading shall be proportioned separately, prior to adding the other materials of the mixture, in a manner that will result in a uniform and homogeneous blend.

The aggregate shall be proportioned using a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be determinable. The MSE shall be proportioned by a positive displacement pump. Variable rate emulsion pumps, if used, shall be calibrated and sealed in the pump's calibrated condition in conformance with California Test 109 prior to usage. The delivery rate of aggregate and MSE per revolution of the aggregate feeder shall be calibrated at the appropriate gate settings for each mixer-spreader truck used on the project in conformance with California Test 109.

The aggregate belt feeder shall deliver aggregate to the pugmill with such volumetric consistency that the deviation for any individual aggregate delivery rate check-run shall not exceed 2 percent of the mathematical average of 3 runs of a minimum of 3 tons each. The emulsion pump shall deliver MSE to the pugmill with such volumetric consistency that the deviation for any individual delivery rate check-run shall be within 2 percent of the mathematical average of 3 runs of a minimum of 300 gallons each.

The MSE storage tank shall be located immediately before the emulsion pump and shall be equipped with a device which will automatically shut down the power to the emulsion pump and aggregate belt feeder when the MSE level is lowered to a point where the pump suction line is exposed.

A temperature-indicating device shall be installed in the emulsion storage tank at the pump suction level. The device shall indicate the temperature of the MSE and shall be accurate to within 5°F.

The belt delivering the aggregate to the pugmill shall be equipped with a device to monitor the depth of aggregate being delivered to the pugmill. The device for monitoring the depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of aggregate is less than the target depth of flow. A second device shall be located where the device will monitor the movement of the aggregate belt by detecting revolutions of the belt feeder. The devices for monitoring no flow or belt movement shall automatically shut down the power to the aggregate belt when the aggregate belt movement is interrupted. The device to detect revolutions of the belt feeder will not be required where the aggregate delivery belt is an

integral part of the drive chain. To avoid erroneous shutdown by normal fluctuation, a delay of 3 seconds will be permitted between sensing and shutdown of the operation.

#### General

Mixing and spreading equipment for micro-surfacing must proportion asphaltic emulsion, water, aggregate, and any set-control additives by volume and mix them in continuous pugmill mixers. Continuous pugmill mixers must be of adequate size and power for the type of materials to be mixed. Mixing and spreading equipment shall be approved by the Engineer prior to the start of the Work. Mixer-spreader machines, if authorized, shall conform to these Special Provisions except that mixer-spreader trucks may be used in the following areas only:

- 1. Cul-de-sacs.
- 2. Side streets.
- 3. Gore areas.
- 4. Areas requiring hand work.

Continuous Self-Loading Mixing Machine. Continuous self-loading mixing machines shall be automatically sequenced and self-propelled. The mixing machine shall deliver the materials to a double shafted mixer and discharge the mixed product on a continuous flow basis. The mixing machine shall have sufficient storage capacity to maintain a continuous supply of materials to the proportioning controls. The mixing machine shall be self-loading without interrupting placement. The mixing machine operator shall have full control of forward and reverse speeds during placement.

# **Mixer-Spreader Machines**

Mixer-spreader machines (machines) shall be specifically designed and manufactured to place microsurfacing, self-propelled, self-loading, and capable of loading materials while continuing to lay microsurfacing. Machines shall be equipped with a continuous-flow mixing unit capable of accurately proportioning and delivering the aggregate, MSE, mineral filler, water and additives to a revolving double-shafted mixer and discharging the resulting microsurfacing mixture on continuous-flow basis. Batch machines will not be acceptable. Machines shall have sufficient storage capacity for aggregate, MSE, mineral filler, water and additives to maintain an adequate supply to the proportioning controls. All indicators shall be in working order prior to commencing mixing and spreading operations. Rotating and reciprocating equipment shall be covered with metal guards.

Machines shall not be operated unless low-flow and no-flow devices and revolution counters are in good working condition and functioning and metal guards are in place. The required indicators shall be visible while walking alongside a machine.

Aggregate feeders shall be connected directly to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with a revolution counter reading to the nearest one-tenth of a revolution.

The identifying number of each machine shall be a minimum of 3 inches in height, located on the front and rear of the vehicle.

The microsurfacing mixture shall be spread by means of a spreader box. However, when wheel path depressions have a cross section that is deformed 1/2 inch or more, the individual wheel paths shall first be filled utilizing a wheel path depression (rut) box.

# **Spreader Box**

Spreader boxes shall be capable of placing the microsurfacing mixture a minimum of 14 feet wide and preventing loss. Spreader boxes over 8 feet in application width shall have baffles, reversible motor driven augers or other suitable means to insure uniform application on superelevated sections and shoulder slopes. Spreader boxes shall be maintained in such manner as to prevent chatter (wash boarding) in the finished mat. Spreader boxes shall be clean and free of microsurfacing mixture at the start of each work shift.

Spreader boxes shall have a series of strike-off devices at the rear. The leading strike-off device shall be fabricated of steel, stiff rubber or other suitable material. The number of strike-off devices shall be determined by the Contractor. The first strike-off device shall be designed to maintain close contact with the pavement during the spreading operations, shall obtain the thickness required, and shall be capable of being adjusted to the various pavement cross sections for application of a uniform microsurfacing finished surface. All strike-off devices shall be fabricated of flexible material suitable for the intended use and shall be designed and operated to ensure that a uniform texture is achieved in the finished surface. The final strike-off device shall be cleaned daily and changed if problems with longitudinal scouring occur.

Flexible fabric drags attached to the rear of the spreader box shall not be used.

Wheel Path Depression (Rut) Box. Rut boxes, if used, shall be designed to have adjustable strike-off devices to regulate the depth and shall have a width of between 5 and 6 feet. Hydraulic augers, or similar devices, shall be installed and shall be capable of moving the mixed material from the rear to the front of the filling chamber. These devices shall also be capable of guiding the larger aggregate into the center, deeper section of the wheel path depression, and forcing the finer material toward the outer edges of the spreader box.

In areas inaccessible to a rut box, the microsurfacing mixture may be spread by other methods approval by the Engineer.

## PREPARATION FOR MICROSURFACING

Before placing microsurfacing, the pavement surface shall be cleaned by sweeping, flushing or other means necessary to remove loose particles of paving, dirt, and other extraneous material. When required by local conditions, the roadway surface may be fogged with water ahead of the spreader box. The application of the fog spray may be adjusted to suit temperatures, surface texture, humidity, and dryness of pavement.

Thermoplastic striping and pavement markings, raised pavement markers, and raised pavement marker adhesive shall be removed.

Manhole covers, utility vaults and the surfaces of other utility facilities, survey monuments and benchmarks, shall be covered using a material approved by the Engineer. The material and procedure shall result in no adherence of the microsurfacing to the facility and no stripping of the

microsurfacing from the adjacent pavement.

## **PLACEMENT**

Microsurfacing shall be uniformly spread on the existing surfacing within the rate specified without spotting, re-handling, or otherwise shifting the mixture.

Microsurfacing shall not be placed when either the ambient or pavement temperature is below 50°F or during unsuitable weather. Microsurfacing shall not be placed if rain is imminent or if there is the possibility that there will be freezing temperatures within 24 hours.

When wheel path depressions have a cross section that is deformed ½ inch or more, the individual wheel paths shall first be filled utilizing a wheel path depression (rut) box. The depth of the wheel path depression shall be determined after adjacent ridges have been removed. The maximum single application for wheel path depressions shall be 1 inch. Wheel path depressions of depths greater than 1 inch shall require multiple applications in each depression.

Wheel path depression repair shall be constructed with a slight crown to allow for initial compaction by traffic on the microsurfacing.

Freshly filled wheel path depressions shall be compacted by traffic for a minimum of 48 hours before additional lifts of microsurfacing are placed for rut filling purposes or as surface courses.

Microsurfacing shall be spread at the rates of pounds of dry aggregate per square yard shown in the following table.

Microsurfacing Spread Rates

Microsurfacing Type	Location	Spread Rate(lbs/yd²)
Type II	Full Lane Width	18-24
Type III	Full Lane Width	18-30

Longitudinal joints shall correspond with the edges of the final traffic lanes. The Engineer may permit other patterns of longitudinal joints if the patterns will not adversely affect the quality of the finished product.

Through traffic lanes shall be spread in full lane widths only. Longitudinal joints common to 2 traffic lanes shall be butt joints with overlaps not to exceed 3 inches. Building paper shall be placed at the transverse joints to avoid double placement of the microsurfacing. Transverse joints shall be straight, clean and have no variation in surface texture from the rest of the mat. Other suitable methods to avoid double placement of the microsurfacing will be allowed. Hand tools shall be available to remove spillage.

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

Microsurfacing shall be protected from damage by traffic until such time that the mixture has

cured sufficiently so that the microsurfacing will not adhere to or be picked up by the tires of vehicles.

Microsurfacing shall be swept approximately 24 hours after placement to remove loosened or shed aggregate particles. Thereafter, microsurfacing shall be swept, when directed by the Engineer, for up to 10 days after placement to remove loosened or shed aggregate particles. Sweeping shall be performed in such a manner that the microsurfacing will not be damaged.

## **TEST STRIP**

The Contractor shall construct a minimum of 2 test strips for evaluation by the Engineer. Each test strip shall be a minimum of 300 feet long, a minimum of 400 square yards in size, shall replicate the full production placement of microsurfacing, and shall consist of the application courses specified. Each test strip shall be constructed at the same time of day that the full production of microsurfacing will be placed. Each test strip may be constructed in 2 days when multiple course applications are specified. If the microsurfacing is to be placed on a scrub seal, ruuberized chip, or chip seal, the test strips must be placed over the underlying seal coat. The Contractor shall propose adjustments in the mixture to compensate for sudden changes in weather conditions.

The Engineer will evaluate each completed test strip for 48 hours after traffic has been allowed on it to determine if the mix design and placement procedure are acceptable. If the mix design or the placement procedure is determined by the Engineer to be unacceptable, the test strips will be rejected, the Contractor shall make modifications, and new test strips shall be constructed. The new test strips will be evaluated by the Engineer as previously specified. Rejected test strips shall be removed if so directed by the Engineer.

# **MEASUREMENT**

Microsurfacing will be measured by the combined weight of the tons of dry aggregate and the tons of MSE used in the microsurfacing mixture placed and accepted by the Engineer. The weight of added water, additives, and mineral filler used in the microsurfacing mixture will not be included in the weight measured for payment. No deduction will be made for water in the aggregate and MSE.

The Contractor shall furnish the Engineer with a written plan covering the intended method of delivery, storage and measurement of dry aggregate and MSE. The Contractor shall furnish the Engineer with licensed weigh master tickets for each load of dry aggregate and MSE delivered to the stockpile site or directly to each mixer-spreader machine.

Prior to starting the microsurfacing operation, the Contractor shall furnish, at no cost to the County, current weigh master's certificates indicating the net weight of the dry aggregate and portable drive on scales. The Contractor shall provide a drive upon scale at the project site or an alternate site approved by the County. The drive on scale shall show the net weight of the dry aggregate on each machine. Each microsurfacing mixing machine used on the project shall carry a calibrated emulsion measuring stick similar to the measuring stick used on slurry application as specified in these Special Provisions.

Prior to applying the microsurfacing, the process of determining the net weight of the dry aggregate and the amount of MSE used, in gallons, shall be performed in the presence of the Engineer.

# Method of Payment

Payment for microsurfacing will be made at the Contract Unit Price per ton for "MICROSURFACING. The Contract Unit Price per ton shall include performing all the work involved in placing microsurfacing, complete in place, including testing for and furnishing mix design(s), test strips, rut filling, portable scales, cleaning the surface, furnishing added water, additives, and mineral filler, protecting the microsurfacing until it has set, repair of early distress, and sweeping the microsurfacing.

No payment will be made for test strips which have been rejected or for removal of rejected test strips.

# **PAINT TRAFFIC STRIPE:**

Painting traffic stripe shall conform to the provisions in Sections 84-1, "General" and 84-3, "Painted Traffic Stripes and Pavement Markings" of the Standard Specifications and these Special Provisions.

Traffic striping shall be applied in two coats with airless equipment and shall be performed with a roadliner truck mounted striping machine. Where the configuration or location of a traffic stripe is such that the use of a roadliner truck mounted striping machine is unsuitable, traffic striping and glass spheres may be applied by other methods and equipment approved by the Engineer.

Newly painted traffic striping shall be protected from damage by public traffic or other causes until the paint is thoroughly dry. Any newly painted traffic striping which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted by the Contractor and any associated removals shall be performed as called for in these Special Provisions.

At Washington Street, Contractor shall paint new stripings at night time.

#### **Method of Payment**

The contract price paid per linear foot for Paint Traffic Stripe (2 Coats) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in painting traffic stripe (regardless of the number, widths, and types of individual stripes involved in each traffic stripe) including any necessary cat tracks, dribble lines any layout work, complete in place as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

# THERMOPLASTIC CROSSWALK AND PAVEMENT MARKING:

Thermoplastic crosswalk and pavement markings shall conform to the provisions in Sections 84-1, "General," and 84-2, "Thermoplastic Traffic Stripes and Pavement Markings," of the Standard Specifications and these Special Provisions.

Newly painted traffic striping shall be protected from damage by public traffic or other causes until the paint is thoroughly dry. Any newly painted traffic striping which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted by the Contractor and any associated removals shall be performed as called for in these Special Provisions.

At Washington Street, Contractor shall install thermoplastic pavement markings and pavement markers at night time.

# **Method of Payment**

The contract price paid per square foot for Thermoplastic crosswalk and pavement marking shall be paid by the square foot price bid and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and doing all the work necessary to place the pavement markings complete in place and no additional compensation will be allowed.

# **PAVEMENT MARKER (REFLECTIVE):**

Pavement markers, shall conform to the provisions of Section 85, "Pavement Markers," of the State of California Standard Specifications and these Special Provisions.

Certificates of compliance shall be furnished for pavement markers as specified in "Prequalified and Tested Signing and Delineation Materials," elsewhere in these Special Provisions.

Reflective pavement markers shall comply with the specific intensity requirements for reflectance after abrading the lens surface in accordance with the "Steel Wool Abrasion Procedure," specified for pavement markers placed in pavement recesses in Section 85-1.05, "Reflective Pavement Markers", of the State of California Standard Specifications.

Non-reflective pavement markers, shall conform to the requirements of Section 85-1.04 "Non-Reflective Pavement Markers," of the State of California Standard Specifications. The bituminous adhesive used to install the markers shall be a hot melt bituminous adhesive asphaltic material with homogeneously mixed mineral filler and shall conform to the requirements specified in Section 85-1.055, "Adhesives," of the State of California Standard Specifications.

Reflective pavement markers shall be installed at locations as established by the applicable Caltrans striping detail noted on the approved striping Plan, which includes, but is not limited to temporary painted line(s), new striping or existing striping. There shall be one marker for each location. All work necessary to establish satisfactory locations for markers shall be performed by the Contractor.

Existing reflective pavement markers that do not conform to the approved Plan shall be removed by the Contractor.

Reflective pavement markers shall be of the prismatic reflector type (3M model white RP290w and yellow RPM 2912y or equal) as outlined in Subsection 85-1.05, "Reflective Pavement Markers," of the State of California Standard Specifications.

Blue reflective pavement markers designating the location of fire hydrants within project limits shall be replaced after the paving is completed at all fire hydrants locations, whether the blue reflective makers exist or not prior to paving. Installation of blue markers shall comply with the requirements of Riverside County Fire Department, Standard No. 06-11, attached to these Special Provisions.

# **Method of Payment**

Full compensation for reflective pavement markers, non-reflective pavement markers, and blue pavement markers (at fire hydrants) shall be considered as included in the price paid per each for Pavement Markers (Reflective), and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing pavement markers (reflective, non-reflective, or blue) complete, in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions and as approved by the Engineer.

Section 4-1.03 B(1), Increases of More Than 25 Percent, of the State Standard Specifications will not apply to Pavement Markers (Reflective). No adjustment to the contract unit bid price will be allowed for any excess of over 25 percent of the estimated quantity for Pavement Markers (Reflective).

# FINAL CLEAN UP:

Before final inspection of the work, the Contractor shall clean the roadway, material sites, and all ground occupied by the Contractor in connection with the work of all rubbish, excess materials, and equipment. All parts of the work shall be left in a neat and presentable condition.

The Contractor shall provide street sweeping within one month after completion as directed by the Engineer.

# **Method of Payment**

The Contractor shall be responsible for removal of slurry tracked by vehicles on to driveways if requested by residents or business; unless, documented by the Contractor as a deliberate act (i.e. driving past the flagman or barricades).

Full compensation for final clean up will be considered as included in the contract price for the placement of the slurry seal and no separate payment will be made therefor.

# **OBSTRUCTIONS:**

Attention is directed to Sections 8-1.10, "Utility and Non-Highway Facilities", and 15, "Existing Highway Facilities" of the Standard Specifications and these Special Provisions.

Existing utility and privately owned facilities shall be protected in accordance with Section 7-1.11, "Preservation of Property" and these Special Provisions. The Contractor is also responsible to protect those facilities that are to be relocated by others prior to or during construction, and shall protect those facilities in both their existing and their ultimate locations. The Contractor shall cooperate with owners and their Contractors of utility and privately owned facilities, for the relocation of said facilities, in accordance with Section 7-1.14, "Cooperation" of the Standard Specifications.

All water valves and covers, gas valves and covers, sewer manholes, survey markers and any other utility appurtenances shall be protected in place.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety and welfare of workmen and the public. Facilities requiring special precautions include, but are not limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipe lines greater than 6 inches in diameter or pipe lines operating at pressures greater than 60 psi (gage); underground electric supply system conductors or cables either directly buried or in duct or conduit which do not have concentric neutral conductors or other effectively grounded metal shields or sheaths; and underground electrical conductors with potential to ground of more than 300 volts. The Contractor shall notify the Engineer at least twenty-four hours prior to performing any work in the vicinity of such facilities.

Attention is directed to the requirements of Government Code Sections 4216-4216.9 pertaining to existing utility facilities.

Any utility facility if damaged by the contractor's operation shall be repaired or replaced by the contractor and repair/replacement cost shall be borne entirely by the Contractor.

## **Method of Payment**

Full compensation for all costs, including labor, equipment, materials and incidentals, required to comply with the requirements of this section above, including protection of water valves and covers, gas valves and covers, sewer manholes, survey monuments, survey markers and any other utility appurtenances, shall be considered as included in the various items of work, and no additional compensation will be allowed therefor.

### **INDEX:**

Liquidated Damages, 3

M Α Adjoining Streets, 15 Mail Service, 17 Application Rate, 29 Mailboxes, 14 AQMD Regulations, 26 Maintenance, 8, 12, 13, 30, 32 Manholes, 45 Atmospheric Temperature, 31 Measuring Stick, 29 Missed, 17 В Mix Design, 27, 28, 31 Barricades, 13, 15, 17, 30, 44 Mixer, 28, 29 Blue Marker, 31, 44 MUTCD, 12 C N Calendar Day, 3, 9, 12, 16, 18, 20, 27 No Parking, 15, 16, 17, 18, 30 Calibration, 28 Noncompliance, 15 Certificate of Compliance, 4 Notice to Proceed, 2, 3, 9, 13, 28 Nuisance Water, 31 Certified Weighmaster Tickets, 32 Changeable Message Sign, 13, 15 Cracks, 19, 32 P Crosswalk, 26, 31 Pavement Markings, 26, 27 Cul-De-Sacs, 15, 31 Payments, 9, 10, 12, 15, 18, 27, 44, 45 Pedestrian, 12, 13, 14 D Placed Per Day, 29 Deficiency, 15 Printed Notifications, 16 Delay, 3, 18 Detour, 12 R Dust, 12, 19, 26 Rate, 3, 29, 32 Ripples, 31 Ε RPM - Reflective Pavement Markers, 43, 44 ELT - Extra Long Ton, 29, 33 Rubberized Chip Seal, 19 Emulsified Asphalt, 32 Experience, 8, 13, 14 S Experienced Flaggers, 13, 14 Sample, 3, 4, 28 Schools, 16, 17 F Screenings, 2 Flags, 13 Slurry Crew, 31 Spilled, 14 State of California Department of Transportation, 2 G Stockpiling, 14, 30, 32 Grinding, 26, 31 Street Parking, 16, 17 Surface Oil, 31 Survey Monuments, 19, 45 Н Suspension Of Work, 10, 30 Herbicide, 19, 20, 32 Sweeping, 10, 11, 12, 16, 19, 20, 32, 44 Holidays, 2, 13, 14 **SWPPP**, 7, 8 Hours of Work, 2 T L Temperature, 19, 30, 31 Latex, 32 Temporary Street Closures, 12

Temporary Striping and Pavement Marking, 15, 43

Test Strip, 27 Testing, 3, 4, 28, 32 Thermoplastic, 26, 27, 31 Traffic Control Plans, 12, 13, 15 Trash Collection, 16, 17

U

Utility, 16, 17, 18, 19, 45

٧

Valve Covers, 45

Verbal Notification, 16

W

Water Pollution Control, 7
Waves, 31
Weather, 2, 30
Weeds, 19, 32
Wet Track, 28
Working Days, 2, 3, 9, 10, 12, 13, 16, 28, 30, 32
WPCP, 7, 8, 9, 10

### Appendix A

### **AQMD Recommendations**

### **Dust Abatement Attachments**

### **Table of Contents**

<u>Description</u>	<u>Page</u>
Signage Recommendation (AQMD document, modified)	1
Sample Dust Control Plan (AQMD sample)	5
Dust Control Plan Review Checklists (AQMD document)	6
Reasonably Available Control Measures (from Rule 403 Implementation Handbook)	10
Best Available Control Measures (from Rule 403 Implementation Handbook)	16
Best [Reasonably] Available Control Measures for High Winds Conditions (from Rule 403 Implementation Handbook)	22
Track Out Control Options (from Rule 403 Implementation Handbook)	26

### AQMD SIGNAGE RECOMMENDATIONS

### November, 2001

Plan holder shall post signage at specified locations on the subject property in accordance with the standards specified below. The exception to the standards is that all letters shall be 4 inches high, with the names and telephone numbers of appropriate contacts and services in bold print, as indicated in the standards. These signs shall also include the SCAQMD toll free complaint line 1-800-CUT-SMOG (1-800-288-7664) and the telephone number for the Environmental Observer. These signs shall be posted within 50 feet of the curb on all four (4) corners of the subject property.

For each Dust Control Plan aggregating less than, or equal to, ten (10) acres:

- 1. The applicant shall install a sign on such property which is visible to the public that meets the following requirements:
  - (a) Such sign shall measure at least four (4) feet wide by four (4) feet high and conform to the specifications in 1 (a) below.

For each Dust Control Plan aggregating over ten (10) acres:

- 2. The applicant shall install a sign on such property which is visible to the public that meets the following requirements:
  - (a) Such sign shall measure at least eight (8) feet wide by four (4) feet high and conform to the specifications in 1 (b) below.

### THE SIGN SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- 1. The sign boards shall be constructed with materials capable of withstanding the environment in which they are placed.
  - (a) For 4' x 4' signs, the District recommends the following:
    - 3/4 " A/C laminated plywood board
    - II. Two 4" x 4" posts
    - III. The posts should be attached to the edges of the plywood board with at least 2 carriage bolts on each post.
    - IV. The front surface of the sign board should be painted in the contrasting color of a white background with black lettering.
  - (b) For 4' x 8' signs, the District recommends the following:
    - I. 1" A/C laminated plywood board
    - II. Two 5" x 6" posts
    - III. The posts should be attached to the 4' edges of the plywood board with at least 2 carriage bolts on each post.
    - IV. The front surface of the sign board should be painted in the contrasting color of a white background with black lettering.

### 2. The sign board shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times until the expiration date of the Dust Control plan.

(a) For 4' x 4' signs, the District recommends the following:

1. The lower edge of the sign board should be mounted at least 2' above the existing ground surface to facilitate ease of viewing.

II. The posts should be set in a hole at least 3' deep with concrete footings to preclude downing by high winds.

III. On the construction site, the sign should be positioned such that nothing obstructs the public's view from the primary street access point.

IV. For construction projects that are developed in phases, the sign should be moved to the area that is under active construction.

- V. In situations where all phases of the construction project are completed on a property prior to expiration of the Dust Control Plan, a written request for cancellation of the Dust Control Plan must be submitted to the Engineer.
- (b) For 4' x 8' signs, the District recommends the following:
  - 1. The lower edge of the sign board should be mounted at least 2' above the existing ground surface to facilitate ease of viewing.

II. The posts should be set in a hole at least 4' deep with concrete footings to preclude downing by high winds.

III. On the construction site, the sign should be positioned such that nothing obstructs the public's view from the primary street access point.

IV. For construction projects that are developed in phases, the sign should be moved to the area that is under active construction.

V. In situations where all phases of the construction project are completed on a property prior to expiration of the Dust Control Plan, a written request for cancellation of the Dust Control Plan must be submitted to the Engineer.

### 3. The sign board shall contain the following information:

- (a) Project Name
- (b) Name of Prime Contractor
- (c) Phone Number of Contractor's Employee Responsible for Dust Control Matters
- (d) County designated phone number (to be provided by the Engineer)
- (e) South Coast Air Quality Management District Phone Number

### **AQMD** Recommendations

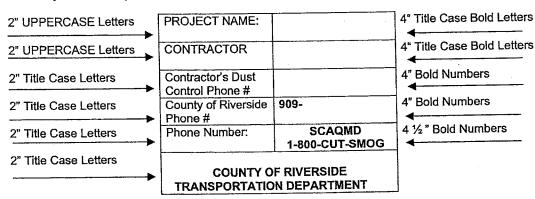
- 4. The sign board shall be designed to the following alpha and numeric text dimensions (sign boards written in longhand are unacceptable).
  - (a) For a permittee subject to the 4' x 4' sign requirement, the District provides the following example: (as modified by the County of Riverside for use on County Public Works projects)

1" UPPERCASE Letters	PROJECT NAME:		3 ½ " Title Case Bold Letters
1" UPPERCASE Letters	CONTRACTOR		3 ½ " Title Case Bold Letters
1" Title Case Letters	Contractor's Dust Control Phone #		3" Bold Numbers
1" Title Case Letters	County of Riverside Phone #		3" Bold Numbers
1" Title Case Letters	Phone Number:	SCAQMD 1-800-CUT-SMOG	3 ½ " Bold Numbers  ◀

<sup>&</sup>quot;Title Case" means the first letter of a word is capitalized and subsequent letters are lower case.

### **AQMD Recommendations**

(b) For a permittee subject to the 4' x 8' sign requirement, the District provides the following example: (as modified by the County of Riverside)



### Plan Review Checklist Clearing/Grubbing/Mass Grading Phase

	If feasible, use grading permit conditions to break the project into phases so that only a portion of the site is disturbed at any given time to ensure control of fugitive dust. This technique is critical for project sites with greater than 100 acres.
	Prior to initiating activity, pre-water site through use of portable inigation lines. At least 72 hours of pre-watering is recommended for each area prior to initiating earth-movement. Require the Applicant to specify water source and available flow rate [g/m].
	Water applied continuously to all disturbed portions of the site by means of water truck/water pull as necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Also, for cut and fill activities, one 10,000 gallon water pull is estimated to be necessary for each 7,000 cubic yards of daily earth-movement. Multiple 4,000-gallon water trucks may be used in place of one 10,000-gallon water pull. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during mass grading and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
· .	Water towers are necessary for projects with more than 10 acres of active construction. Without a water tower, it can take up to 30 minutes to fill a 2,000 gallon water truck. Also, multiple water towers are necessary for projects that use water pulls as filling one 10,000 gallon water pull can drain a water tower which takes up to 40 minutes to refill.
	Wind fencing is necessary between the site and nearby residences or businesses. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through the site.
	A perimeter watering system consisting of portable inigation equipment may be an effective mitigation system to protect surrounding residences and businesses. The portable watering system may be used in place of or in conjunction with watering trucks. The local jurisdiction may also be provided access to this equipment.

### **AQMD** Recommendations

Construction site accesses are to be improved with 1.5° gravel maintained to a depth of 4", at least 20' wide, and extending 100 feet into the site. If the project site is not balanced, a wheel washing system and/or ribbed steel plates should be placed in the roadway before the vehicle enters the graveled area to clean the tires and prevent trackout.
Equipment staging areas are to be treated with 1.5" gravel maintained to a depth of 4".
Employee parking areas are to be covered with 1.5" gravel maintained to a depth of 4" or treated with chemical dust suppressants at a 4 to 1 ratio on at least a monthly basis to prevent fugitive dust.
Chemical dust suppressants are to be mixed at a ratio of 20 to 1 and applied to all disturbed surfaces that are proposed to remain inactive for a period of at least 10 consecutive days. These products are effective in preventing and controlling dust. Recordkeeping is necessary to demonstrate compliance.
All project sites greater than 100 acres shall monitor daily wind speeds and AQMD forecasted wind events (call 1.800.CUT.SMOG. press one for air quality information, and then press five for Coachella Valley wind forecasts). Operators shall maintain these records for review by any local code enforcement officer or AQMD inspector.
An environmental observer whose primary duty is to oversee dust control at the site is to be used for construction projects greater than 100 acres and/or sites with more than 50 acres of active construction. The environmental observer is tasked with monitoring dust abatement measures and authorized to deploy additional water trucks and other dust control actions (i.e., wind fencing, street sweepers, chemical dust suppressants, etc.) as necessary to prevent or control fugitive dust.
Other (specify):

### Plan Review Checklist Finish Grading Phase

	Water applied continuously to all disturbed portions of the site by means of water truck/water pull as necessary to maintain sufficient visible maisture on the soil surface. For reference, one 2.000 gallon water truck can treat approximately 4 acres of active construction per hour. Also, for cut and fill activities, one 10.000 gallon water pull is estimated to be necessary for each 7.000 cubic yards of daily earth-movement. Multiple 4,000-gallon water trucks may be used in place of a 10,000-gallon water pull. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during finish grading and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
	Water towers are necessary for projects with more than 10 acres of active construction. Without a water tower, it can take up to 30 minutes to fill a 2,000 gallon water truck. Also, multiple water towers are necessary for projects that use water pulls as filling one 10,000 gallon water pull can drain a water tower which takes up to 40 minutes to refill.
	Wind fencing is necessary between the site and nearby residences or businesses to reduct fugitive dust. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through a site.
	Chemical dust suppressants are to be applied at a concentration of at least 10 to 1 to finish graded areas once final elevations have been reached. For areas that will remain inactive for longer periods, vegetation can be a cost-effective alternative to chemical stabilization. Wind fencing or other obstructions can keep the stabilized area free from future disturbances.
	Construction site access(es) are to be improved with 1.5" gravel maintained to a depth of at least 4", with a minimum width of at least 20, extending 100 feet into the project site.
	Equipment staging areas are to be treated with 1.5" gravel maintained to a depth of 4".
	Internal roadway networks are to be treated with chemical dust suppressants at a minimum rate of at least 4 to 1 and retreated on a monthly basis once final roadway elevations have been reached.
	Employee parking areas are to be treated with chemical dust suppressants at a mix ratio of at least 4 to 1 and retreated on at least a monthly basis or covered with 1.5" gravel maintained to a depth of 4" to prevent fugitive dust.
	Other (specify):
•	
	$\cdot$

### Plan Review Checklist Construction Phase

□ .	Water applied continuously to all disturbed portions of the site by means of water truck/water pull is necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2.000 gallon water truck can treat approximately 4 acres of active construction per hour. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during the construction phase and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
	Wind fencing is necessary between the site and nearby residences or businesses. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through the site. Block walls, if part of the final project, can replace wind fencing during the construction phase.
	Chemical dust suppressants are to be applied at a concentration of at least 20 to 1 to finish graded areas once final elevations have been reached. For areas that will remain inactive for longer periods, vegetation can be a cost-effective alternative to chemical stabilization. Wind fencing or other obstructions can keep the stabilized area free from future disturbances.
	Construction site accesses are to be improved with 1.5" gravel, maintained to a depth of 4", with a width of at least 20', extending 100' into the project site. Paving internal roadways can substitute for gravel.
	Internal roadway networks are to be paved as early as feasible in the construction phase. Street sweeping of internal and/or external access roads will likely be required to control entrained road dust.
	Employee parking areas are to be treated with chemical dust suppressants at a mix ratio of no less than 4 to 1 and retreated on a monthly basis, or more frequently if fugitive dust is observed. If internal roadway is complete, employees are to be instructed to park on paved roads.
	Other (specify):

### RULE 403 IMPLEMENTATION HANDBOOK

### REASONABLY AVAILABLE CONTROL MEASURES

Paragraph (d)(3) of Rule 403 allows activities <u>outside the South Coast Air Basin</u> (see Figure 2-1) to implement reasonably available control measures in lieu of best available control measures. Additionally, as specified by subparagraph (f)(3)(D) of Rule 403, any person seeking approval of a fugitive dust emissions control plan for projects <u>outside the South Coast Air Basin</u> must demonstrate to the satisfaction of the District that the given activity is employing all reasonably available fugitive dust control measures.

The District has prepared the attached listing of reasonably available fugitive dust control measures for a variety of source categories. This list is based on the U.S. Environmental Protection Agency's reference document entitled, "Control of Open Fugitive Dust Sources," Midwest Research Institute, September 1988.

The District encourages the use of those dust control measures that minimize the use of potable water. When water is needed, reclaimed water should be utilized to the greatest extent feasible.

## HANDBOOK 403 IMPLEMENTATION RULE

## REASONABLY AVAILABLE CONTROL MEASURES

a listing of the courses of finitive dust which are intended for emission control under District Rule 403 ava

The left column contains a listing of the source 403 and a listing of control measures and high available fugitive dust control measures for each	s of fug -wind of the	The left column contains a listing of the sources of fugitive dust which are intended for emission control under District Rule 403 and a listing of control measures and high-wind measures. The right column contains a description of the reasonably available fugitive dust control measures for each of the sources.
Source: (1) Land Clearing/Earth-Moving		
CONTROL MEASURES	DESC	DESCRIPTION
(A) Watering	Ξ	Application of water by means of trucks, hoses and/or sprinklers prior to conducting any land clearing. This will increase the moisture content of the soils; thereby
	ලිලි	increasing its stability.  Pre-application of water to depths of proposed cuts.  Once the land clearing/earth moving activities are complete, a second application of water can generate a thin crust that stabilizes the disturbed surface area provided that it is not disturbed. (Security fencing can be used to prevent unwanted future disturbances of sites where a surface crust has been created).
(B) Chemical stabilizers	<b>EB</b>	Only effective in areas which are not subject to daily disturbances.* Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.
(C) Wind fencing	Ξ	Three- to five-foot barriers with 50% or less porosity located adjacent to roadways or urban areas can be effective in reducing the amount of windblown material
	<b>3</b>	lenving a site. Would likely be used in conjunction with other measures (e.g., watering, chemical stabilization, etc.) to ensure that visible emissions do not cross a property line.
(D) Cover haul vehicles	Ξ	Entire surface area of hauted earth should be covered once vehicle is full.
(E) Bedliners in haul vehicles	Ξ	When feasible, use in bottom-dumping haul vehicles.
HIGH WIND MEASURE		

Cease all active operations; or Apply water within 15 minutes to any soil surface which is being moved or otherwise disturbed. 

CONTROL MEASURES	DES	DESCRIPTION
(F) Paving	(E)	(1) Requires street sweeping/cleaning if subject to material accumulation.
(G) Chemical stabilization	(1)	<ol> <li>Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule</li> <li>Not recommended for high volume or heavy equipment traffic use.</li> </ol>
(H) Watering	(3)E	In sufficient quantities to keep surface moist. Required application frequency will vary according to soil type, weather conditions, and vehicular use.
(I) Reduce speed limits	<b>(C)</b>	(1) 15 mile per hour maximum. May need to be used in conjunction with watering or chemical stabilization to prevent visible emissions from crossing the property line.
(J) Reduce vehicular trips	(E)	(1) Access restriction or redirecting traffic to reduce vehicle trips by a minimum of 60 percent.
(K) Gravel	(1)	(1) Gravel maintained to a depth of four inches can be an effective

Unpaved Roads

3

## HIGH WIND MEASURE

Apply a chemical stabilizer (to meet the specifications established by the Rule) prior to wind events; or

Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible.

measure.

3

Apply water once each hour; or Stop all vehicular traffic. 

## HANDBOOK 403 IMPLEMENTATION RULE

Storage Piles

0

Source:

CONTROL MEASURES	•	DESCRIPTION
(L) Wind sheltering	(5)	Enclose in silos. Install three-sided barriers equal to height of material, with no more than 50 percent porosity.
(M) Watering	<b>6</b>	Application methods include: spray bars, hoses and water trucks. Frequency of application will vary on site-specific conditions.
(N) Chemical stabilizers	(1) · (1)	Best for use on storage piles subject to infrequent disturbances.
(O) Altering load-in/load-out procedures	load-out procedures (1)	Confine load-in/load-out procedures to leeward (downwind) side of the material.  May need to be used in conjunction with wind sheltering to prevent visible emissions from crossing the property line.
(P) Coverings	<b>3</b>	•

## HIGH WIND MEASURE

- Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or
  - Apply water once per hour; or Install temporary covers.
  - €.@£

<b>3</b> .
d Track-Out
rack-
<u></u>
go
Road
G
Paved
-
3
ë:
Source
Ŝ

,			
		•	

CONTROL MEASURES

DESCRIPTION

## (Q) Chemical stabilization

# Most effective when used on areas where active operations have

- Vendors can supply information on methods for application and required concentrations.
- Either sweeping or water flushing may be used.
- Entire surface area should be covered once vehicle is full
- When feasible, use in bottom dumping vehicles.
- Pave internal roadway system. Most important segment, last 100 yards from the connection with paved public roads

## HICH WIND MEASURE

Cover all haul vehicles; and Clean streets with water flushing, unless prohibited by the Regional Water Quality Control Board. **ES** 

January 1999

9

Site access improvement

Bedliners in haul vehicles

Sweep/clean roadways

8

Cover haul vehicles

<u>(S)</u>

## HANDBOOK 403 IMPLEMENTATION RULE

	-
ctive Construction Sites	
Disturbed Surface Areas/ Inac	
(3)	
Source:	

ES DESCRIPTION	tion (1) Most effective when used on areas where active operations have	(2) Vendors can supply information on methods for application and
CONTROL MEASURE	(Q) Chemical stabilizat	

t	ree- to live-loot partiers with 20% or less polosie	roadways or urban areas can be effective in reducing the amount of	wind blown material leaving a site.	
,	4 (E)			
·				

(1) Requires frequent applications unless a surface crust can be developed.

roadways or urban areas can be effective in reducing the annount wind blown material leaving a site.  (1) Establish as quickly as possible when active operations have ceased
---

(2) Use of drought tolerant, native vegetation is encouraged.

## HIGH WIND MEASURES

Apply chemical stabilizers (to meet the specifications established by the Rule); or Apply water to all disturbed surface areas 3 times per day. 38

January 1999

(T) Vegetation

(S) Wind fencing

(R) Watering

### RULE 403 IMPLEMENTATION HANDBOOK

### BEST AVAILABLE CONTROL MEASURES

Rule 403, paragraph (d)(2) requires active operations [defined in Rule 403, paragraph (c)(1)] within the South Coast Air Basin (see Figure 2-1) to implement at least one best available control measure for each fugitive dust source type on site. Additionally, as specified by subparagraph (f)(3)(D) of Rule 403, any person seeking approval of a fugitive dust emissions control plan for projects within the South Coast Air Basin must demonstrate to the satisfaction of the AQMD that the given activity is employing all best available fugitive dust control measures.

The AQMD has prepared the attached listing of best available fugitive dust control measures for a variety of source categories. This list is based on the U.S. Environmental Protection Agency's reference document entitled, "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures," Office of Air and Radiation, September 1992.

The AQMD encourages the use of those dust control measures that minimize the use of potable water. When water is needed, reclaimed water should be utilized to the greatest extent feasible.

## HANDBOOK 403 IMPLEMENTATION RULE

## BEST AVAILABLE CONTROL MEASURES

The left column contains a listing of the sources 403 and a listing of control measures and high-w fugitive dust control measures for each of the sou	of fu vind n rrces.	The left column contains a listing of the sources of fugitive dust which are intended for emission control under District Kule 403 and a listing of control measures and high-wind measures. The right column contains a description of the best available fugitive dust control measures for each of the sources.	
Source: (1) Land Clearing/Earth-Moving			
CONTROL MEASURES	DES	DESCRIPTION	
(A) Watering (pre-grading)	3 3	Application of water by means of trucks, hoses and/or sprinklers prior to conducting any land clearing. This will increase the moisture content of the soils; thereby increasing its stability.  Pre-application of water to depths of proposed cuts.	
(A-1) Watering (post-grading)	€ 7	In active earth-moving areas water should be applied at sufficient frequency and quantity to prevent visible emissions from extending more than 100 feet from the point of origin.	• •
(A-2) Pre-grading planning	£8	Grade each phase separately, timed to coincide with construction phase; or Grade entire project, but apply chemical stabilizers or ground cover to graded areas where construction phase begins more than 60 days after grading phase ends.	~
(B) Chemical stabilizers	£	Only effective in areas which are not subject to daily disturbances. Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.	
(C) Wind fencing	<b>E</b> *	Three- to five-foot barriers with 50% or less porosity located adjacent to roadways or urban areas can be effective in reducing the amount of windblown material leaving a site. Must be implemented in conjunction with either measure (A-1) or (B).	
(D) Cover haul vehicles	$\equiv$	Entire surface area of hauted earth should be covered once vehicle is full.	
(E) Bedliners in haul vehicles	$\equiv$	When feasible, use in bottom-dumping haul vehicles.	
HICH WIND MEASURE		•	

### January 1999

Cease all active operations; or Apply water within 15 minutes to any soll surface which is being moved or otherwise disturbed.

### BOOK HAND IMPLEMENTATION 403 Ш R C L

Roads	
Unpaved	
3	
Source:	

## CONTROL MEASURES

DESCRIPTION

### Paving Æ

## (G) Chemical stabilization

### Watering $\Xi$

### Reduce speed limits $\boldsymbol{\Xi}$

- (j) Reduce vehicular trips
- (K) Gravel

Required application frequency will vary according to soil type, weather conditions, and vehicular use. In sufficient quantities to keep surface moist. £0

Not recommended for high volume or heavy equipment traffic use.

Vendors can supply information as to application methods concentrations to meet the specifications established by the Rule

and

Requires street sweeping/cleaning if subject to material accumulation.

- 15 mile per hour maximum. May need to be used in conjunction with watering or chemical stabilization to prevent visible emissions from crossing the property line.  $\Xi$
- Access restriction or redirecting traffic to reduce vehicle trips by minimum of 60 percent.  $\in$
- Gravel maintained to a depth of four inches can be an effective measure.  $\in$ 
  - Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible.  $\mathcal{G}$

## HIGH WIND MEASURE

- Apply a chemical stabilizer (to meet the specifications established by the Rule) prior to wind events; or
  - Apply water once each hour; or **3**50
    - Stop all vehicular traffic.

## HANDBOOK 403 IMPLEMENTATION RULE

Storage Piles

. ල

Source:

CONTROL MEASURES	DESCR	DESCRIPTION
(L) Wind sheltering	(1) Enc (2) Inst thar	Enclose in silos. Install three-sided barriers equal to height of material, with no more than 50 percent porosity.
(M) Watering	(1) App. (2) Free	Application methods include: spray bars, hoses and water trucks. Frequency of application will vary on site-specific conditions.
(N) Chemical stabilizers	(1) Bes	(1) Best for use on storage piles subject to infrequent disturbances.
(O) Altering load-in/load-out procedures	(I) Cor the	(1) Confine load-in/load-out procedures to leeward (downwind) side of the material.  Must be used in conjunction with either measure (L), (M), (N), or (P).
(P) Coverings	(1) Tar (2) Wh 60v	Tarps, plastic, or other material can be used as a temporary covering. When used, these should be anchored to prevent wind from removing coverings.

## HIGH WIND MEASURE

- Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or Apply water once per hour; or Install temporary covers.

# RULE 403 IMPLEMENTATION HANDBOOK

Paved Road Track-Out	
ed Road	
_	
Source:	

DESCRIPTION	Paragraph (d)(5).
CONTROL MEASURES	Compliance with District Rule 403.

## HANDBOOK 403 IMPLEMENTATION RULE

Construction Sites
reas/Inactive
iturbed Surface A
(5) Dis
Source:

CONTROL MEASURES

9

	s have	and
	ve operations	application
	ctive	s for
	n used on areas where active	on methods for
	reas	uo u
	ou	matio
	nseq	infor
	whe	eased. endors can supply
	Most effective	can
	it effe	ceased. Vendors
	Mos	ceas Ven
	$\Xi$	6
•	abilization	
	mical st	
	Che	

•		
(2) Vendors can supply information on methods for application and required concentrations.	(1) Requires frequent applications unless a surface crust can be developed.	(1) Three- to five-foot barriers with 50% or less porosity adjacent to roadways or urban areas can be effective in reducing the amount of wind blown material leaving a site. Must be used in conjunction with either measure (0), (R), or (T).
	2) Watering	(S) Wind fencing

(1) Establish as quickly as possible when active operations have ceased.

## HIGH WIND MEASURES

(T) Vegetation

Apply chemical stabilizers (to meet the specifications established by the Rule); or Apply water to all disturbed surface areas 3 times per day. ලව

TABLE 1

BEST [REASONABLY]' AVAILABLE CONTROL MEASURES FOR HIGH WIND CONDITIONS

FUGITIVE DUST SOURCE CATEGORY		CONTROL MEASURES
Earth-moving	(1A)	Cease all active operations; OR
	(2A)	Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B)	On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR
·	(1B)	Apply chemical stabilizers prior to wind event; OR
	(2B)	Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR
	(3B)	Take the actions specified in Table 2, Item (3c); OR
	(4B)	Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C)	Apply chemical stabilizers prior to wind event; OR
	(2C)	Apply water twice [once] per hour during active operation; OR
• .	(3C)	Stop all vehicular traffic.
Open storage piles	(1D)	Apply water twice [once] per hour, OR
	(2D)	Install temporary coverings.
Paved road track-out	(1E)	Cover all haul vehicles; OR
	(2E)	Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 1 may be used.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

January 1999

TABLE 2
DUST CONTROL ACTIONS FOR EXEMPTION FROM PARAGRAPH (d)(4)\*

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	(1a-1)	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

January 1999

### TABLE 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c)	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 [70] percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c)	Apply chemical stabilizers within five working days of grading completion; OR  Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a)	Apply water to at least 80 [70] percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR Apply dust suppressants in sufficient quantity and
	(3c) (3d)	frequency to maintain a stabilized surface; OR Establish a vegetative ground cover within 21 [30] days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR Utilize any combination of control actions (3a), (3b),
,	(Ju)	and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

### TABLE 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
•	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) (5b)	Apply chemical stabilizers; OR Apply water to at least 80 [70] percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	(5c) (5d)	Install temporary coverings; OR Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile.
All Categories	(6a)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

January 1999

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

### AQMD Recommendations <u>TABLE 3</u> <u>TRACK-OUT CONTROL OPTIONS</u> <u>PARAGRAPH (d)(5)(B)</u>

### CONTROL OPTIONS

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

January 1999



### OFFICE OF CLERK OF THE BOARD OF SUPERVISORS 1st FLOOR, COUNTY ADMINISTRATIVE CENTER P.O. BOX 1147, 4080 LEMON STREET RIVERSIDE, CA 92502-1147

PHONE: (951) 955-1060 FAX: (951) 955-1071 KECIA HARPER-IHEM
Clerk of the Board of Supervisors

KIMBERLY A. RECTOR Assistant Clerk of the Board

June 19, 2015

THE PRESS ENTERPRISE

ATTN: LEGALS PO BOX 792

RIVERSIDE, CA 92501

FAX (951) 368-9018

E-MAIL: legals@pe.com

RE: NOTICE INVITING BIDS: SLURRY SEAL C4-0009 and C4-0010

To Whom It May Concern:

Attached is a copy for publication in your newspaper for TEN (10) TIMES:

- June 24, 2015 Monday - June 29, 2015 Wednesday Tuesday - June 30, 2015 Thursday - June 25, 2015 Wednesday - July 1, 2015 - June 26, 2015 Friday - June 27, 2015 Thursday - July 2, 2015 Saturday - July 3, 2015 Sunday - June 28, 2015 Friday

We require your affidavit of publication immediately upon completion of the last publication.

Your invoice must be submitted to this office, WITH TWO CLIPPINGS OF THE PUBLICATION.

NOTE: PLEASE COMPOSE THIS PUBLICATION INTO A SINGLE COLUMN FORMAT.

Thank you in advance for your assistance and expertise.

Sincerely,

Cecilia Gil

**Board Assistant to:** 

KECIA HARPER-IHEM, CLERK OF THE BOARD

### Gil, Cecilia

From:

PEC Legals Master < legalsmaster@pe.com>

Sent:

Friday, June 19, 2015 8:58 AM

To:

Gil, Cecilia

Subject:

Re: FOR PUBLICATION: Slurry Seal C4-0009 and C4-0010

Received for publication from June 24 to July 3. Proof with cost to follow.

Thank you.

Legal Advertising Phone: 1-800-880-0345 / Fax: 951-368-9018 / E-mail: <a href="mailto:legals@pe.com">legals@pe.com</a>

Please Note: Deadline is 10:30 AM, three (3) business days prior to the date you would like to

publish. \*\*Additional days required for larger ad sizes\*\*

\*\*Employees of The Press-Enterprise are not able to give legal advice of any kind\*\*

### The Press-Enterprise PE.COM/UNIDOS

A Freedom News Group Company

From: Gil, Cecilia < <a href="mailto:CCGIL@rcbos.org">CCGIL@rcbos.org</a> Sent: Friday, June 19, 2015 8:44 AM

To: PEC Legals Master

Subject: FOR PUBLICATION: Slurry Seal C4-0009 and C4-0010

One more...Notice Inviting Bids, for publication from June 24 to July 3, 2015. Please confirm. THANK YOU1

Cecilia Gil Board Assistant

Clerk of the Board 951-955-8464 MS# 1010



### OFFICE OF CLERK OF THE BOARD OF SUPERVISORS 1st FLOOR, COUNTY ADMINISTRATIVE CENTER P.O. BOX 1147, 4080 LEMON STREET RIVERSIDE, CA 92502-1147

PHONE: (951) 955-1060 FAX: (951) 955-1071 KECIA HARPER-IHEM
Clerk of the Board of Supervisors

KIMBERLY A. RECTOR Assistant Clerk of the Board

June 19, 2015

THE DESERT SUN ATTN: LEGALS PO BOX 2734 PALM SPRINGS, CA 92263

FAX (760) 778-4731 E-MAIL: legals@thedesertsun.com

RE: NOTICE INVITING BIDS: SLURRY SEAL C4-0009 and C4-0010

To Whom It May Concern:

Attached is a copy for publication in your newspaper for FIVE (5) TIMES:

Wednesday - June 24, 2015 Thursday - June 25, 2015 Friday - June 26, 2015 Saturday - June 27, 2015 Sunday - June 28, 2015

We require your affidavit of publication immediately upon completion of the last publication.

Your invoice must be submitted to this office, WITH TWO CLIPPINGS OF THE PUBLICATION.

NOTE: PLEASE COMPOSE THIS PUBLICATION INTO A SINGLE COLUMN FORMAT.

Thank you in advance for your assistance and expertise.

Sincerely,

Cecilia Gil

**Board Assistant to:** 

KECIA HARPER-IHEM, CLERK OF THE BOARD

### Gil, Cecilia

From:

Email, TDS-Legals < legals@thedesertsun.com>

Sent:

Friday, June 19, 2015 8:52 AM

To:

Gil, Cecilia

Subject:

RE: FOR PUBLICATION: Slurry Seal C4-0009 and C4-0010

Good Morning,

Ad received and will publish on date(s) requested.

Charlene Moeller | Customer Care Representative / Legals

The Desert Sun Media Group
750 N. Gene Autry Trail, Palm Springs, CA 92262
t 760.778.4578 | f 760.778.4528
legals@thedesertsun.com / dpwlegals@thedesertsun.com

The Coachella Valley's #1 Source in News & Advertising!

www.DesertSun.com | twitter @MyDesert | facebook thedesertsun

This email and any files transmitted with it are confidential and intended for the individual to whom they are addressed. If you have received this email in error, please notify the sender and delete the message from your system

From: Gil, Cecilia [mailto:CCGIL@rcbos.org]

Sent: Friday, June 19, 2015 8:47 AM

To: Email, TDS-Legals

Subject: FOR PUBLICATION: Slurry Seal C4-0009 and C4-0010

Good morning! Notice Inviting Bids for publication from June 24 to June 28. Please confirm. THANK YOU!

### Cecilia Gil

Board Assistant Clerk of the Board 951-955-8464 MS# 1010

From: Gil, Cecilia

Sent: Friday, June 19, 2015 8:45 AM

To: 'legals@pe.com'

Subject: FOR PUBLICATION: Slurry Seal C4-0009 and C4-0010

One more...Notice Inviting Bids, for publication from June 24 to July 3, 2015. Please confirm. THANK YOU1

### Cecilia Gil

Board Assistant Clerk of the Board 951-955-8464 MS# 1010

### **NOTICE TO BIDDERS**

County of Riverside, herein called Owner, invites sealed proposals for:

**Slurry Seal Project** 

District 4
Project No. C4-0009

District 5
Project No. C4-0010

Bid shall be delivered to the County of Riverside Transportation Department, 14<sup>th</sup> Street Annex, 3525 14<sup>th</sup> Street, Riverside, California 92501, telephone (951) 955-6780 not later than 2:00 p.m., on Wednesday, <u>July 8, 2015</u> to be promptly opened in public at said address. Each bid shall be in accordance with plans, specifications and other contract documents, dated <u>April 2015</u>, and prepared by County of Riverside, whose address is same as the above, from whom they may be obtained upon deposit of \$30.00 per set with 11" x 17" plans, plus mailing costs. No refund. Prospective bidders may preview the plans, specifications and other contract documents at no charge prior to purchase at the above noted location.

Pursuant to Labor Code section 1771.1, any Contractor bidding, or subcontractor to be listed on a bid proposal subject to Public Contract Code section 4104, shall not be qualified to bid after March 1, 2015, unless currently registered and qualified to perform public works pursuant to Labor Code section 1725.5. No Contractor or subcontractor may be awarded a contract or perform work on any contract for public work, after April 1, 2015, without proof of current registration with the Department of Industrial Relations pursuant to Labor Code section 1725.5 to perform public works.

The Contractor is required to have a Class "A" or "C-12" or "C-32" license at the time of bid submission.

Engineering Estimate \$1,217,000 - \$1,278,000 (Base Bid)

\$ 243,000 - \$ 283,000 (Alternate Bid 1A) \$ 240,000 - \$ 280,000 (Alternate Bid 1B) \$ 28,000 - \$ 32,500 (Alternate Bid 2)

Bid Bond 10%
Performance Bond 100%
Payment Bond 100%

Working Days 30 Working Days

Website: <a href="http://rctlma.org/trans/Contractors-Corner/Notices-Inviting-Bids">http://rctlma.org/trans/Contractors-Corner/Notices-Inviting-Bids</a>

Dated: June 19, 2015 Kecia Harper-Ihem, Clerk of the Board

By: Cecilia Gil, Board Assistant

### FOR BILLING INQUIRIES: CALL: (951) 388-9710 EMAIL: Billing Inquiry(§) per com

Date	Referance Number	Description	Product/Zone	Size	Billed Units	Times	Rate	Gross Amount	Net Amount
		Description						200.10	
6/24/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1.45	200.10	200.10
6/25/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1.3	179.40	179.40
6/26/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1,3	179.40	179,40
6/27/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1,3	179,40	179.40
6/28/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1,3	179.40	179,40
6/29/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1,3	179.40	179,40
6/30/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1,3	179.40	179,40
7/1/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1,3	179.40	179,40
7/2/2015	10062668		Press-Enterprise	3 x 46 Li	138	1	1.3	179.40	179,40
7/3/2015	10062668		Press-Enterprise	3 x 46 ∐	138	1	1,3	179.40	179,40
	Oi	dered By:							

Things.
3.58 of 06/16/N 2:23

Legal Advertising Invoice

Balance \$1,814.70

Sales Contact Information		Adv	ertiser Information	
Maria Tinajero	Billing Period	Billed Account Number	Advertiser/Client Number	Advertiser/Client Name
951-368-9225	06/24/2015 - 07/03/2015	1100141323	1100141323	BOARD OF SUPERVISORS

THE PRESS-ENTERPRISE PE com

Legal Advertising Invoice

	Advertiser/Client Name	
	BOARD OF SUPERVISORS	3
Billing Period	Billed Account Number	Advertiser/Client Number
06/24/2015 - 07/03/2015	1100141323	1100141323
Balance	Invoice Number	Terms Of Payment
\$1,814.70	10062668	Due Upon Receipt

			_	
Billing	Account	Nama	And	Address

Remittance Address

BOARD OF SUPERVISORS COUNTY OF RIVERSIDE P.O. BOX 1147 RIVERSIDE, CA 92502

The Press-Enterprise POST OFFICE BOX 12009 RIVERSIDE, CA 92502-2209

### THE PRESS-ENTERPRISE

1825 Chicago Ave, Suite 100 Riverside, CA 92507 951-684-1200 951-368-9018 FAX

**PROOF OF PUBLICATION** (2010, 2015.5 C.C.P)

Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc.:

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673, under date of August 25, 1995, Case Number 267864, under date of February 4, 2013, Case Number RIC 1215735, under date of July 25, 2013, Case Number RIC 1305730, and under date of September 16, 2013, Case Number RIC 1309013; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

06/24, 06/25, 06/26, 06/27, 06/28, 06/29, 06/30, 07/01, 07/02, 07/03/2015

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: Jul 03, 2015

At: Riverside, California

**BOARD OF SUPERVISORS** COUNTY OF RIVERSIDE P.O. BOX 1147 RIVERSIDE, CA 92502

Ad Number: 0010062668-01

P.O. Number:

### Ad Copy:

### NOTICE TO BIDDERS

County of Riverside, herein called Owner, invites sealed proposals for:

Slurry Seal Project

District 4 Project No. C4-0009

District 5 Project No. C4-0010

Bid shall be delivered to the County of Riverside Transportation Department, 14th Street Annex, 3525 14th Street, Riverside, California 92501, telephone (951) 955-6780 not later than 2:00 p.m., on Wednesday, **July 8, 2015** to be promptly opened in public at said address. Each bid shall be in accordance with plans, specifications and other contract documents, dated **April 2015**, and prepared by County of Riverside, whose address is same as the above, from whom they may be obtained upon deposit of \$30.00 per set with 11" x 17" plans, plus mailing costs. No refund. Prospective bidders may preview the plans, specifications and other contract documents at no charge prior to purchase at the above noted location.

Pursuant to Labor Code section 1771.1, any Contractor bidding, or subcontractor to be listed on a bid proposal subject to Public Contract Code section 4104, shall not be qualified to bid after March 1, 2015, unless currently registered and qualified to perform public works pursuant to Labor Code section 1725.5. No Contractor or subcontractor may be awarded a contract or perform work on any contract for public work, after April 1, 2015, without proof of current registration with the Department of Industrial Relations pursuant to Labor Code section 1725.5 to perform public works.

The Contractor is required to have a Class "A" or "C-12" or "C-32" license at the time of bid submission.

Engineering Estimate

\$1,217,000 - \$1,278,000 \$ 243,000 - \$ 283,000 \$ 240,000 - \$ 280,000 \$ 28,000 - \$ 32,500

(Base Bid) (Alternate Bid 1A) (Alternate Bid 1B) (Alternate Bid 2)

Bid Bond Performance Bond Payment Bond Working Days 10% 100%

30 Working Days

http://rctlma.org/trans/Contractors-Corner/Notices-Inviting-Bids

Kecla Harper-Ihem, Clerk of the Board By: Cecilia Gil, Board Assistant Dated: June 19, 2015

6/24 - 7/3

### The Desert Sun

mydesert.com

750 N. Gene Autry Trail Palm Springs, CA 92262 Billing Inquiries: (866) 875–0854 Main Office: (760) 322–8889

### ADVERTISING INVOICE/STATEMENT

Make Checks payable to DESERT SUN PUBLISHING CO. P.O. Box 677368 Dallas, TX 75267–7368 A finance charge of 1.5% per month(18% Annually) will be added to balances not paid by the 20th.

RIVOL9000000000000000053151120154116610821

48

RIVERSIDE COUNTY-BOARD OF SUP. PO BOX 1147 RIVERSIDE CA 92502-1147

PLEASE RETURN THIS TOP SECTION WITH PAYMENT IN THE ENCLOSED ENVELOPE AND INCLUDE YOUR CUSTOMER NUMBER ON REMITTANCE.

Customer No.	Invoice No.
RIV069	0005315112
For the Period	Thru
06/01/15	06/28/15
Due Date	Amount Due
Due Date 07/13/15	Amount Due 15,411.66

						Timos			Total			1
Date	EDT	Class		Description		'AUR'	Col	Depth	Total Size	Rate	Amount	l
0621	CLS CLS CLS CLS CLS CLS		BALANCE FORWARD CECILIA NO 0773 – RES 20 ORD 925 NO 0847 BOARD OF ORD 580.6 NO 0848 BOARD OF RES 2015–029NO 0849 NOTICE O ORD 779.16 NO 0869 BOARD OF CECILIA GIL NO 0907 NOTICE O CECILIA NO 0917 NOTICE T			2 2 2 6 2 4 10	4 2 2 2 2 2 2 2	10.25 63.00 53.00 284.00 681.00 75.00 60.00	82.00 252.00 212.00 3408.00 2724.00 600.00 1200.00	)	8,960.46 1,377.60 157.20 133.20 2,050.80 1,640.40 366.00 726.00	
							3	Tras	sp.	06/11	2015 JUL -7 AM 11: 49	CLERK / BOARD OF SUPERVISORS
Cı	urrent	Ove	r 30 Days	Over 60 Days	Over 90 Days	Over 120	) Day	s	To	tal Due		
6,3	373.26	9,	038.40	.00	.00	.00			15,	411.66		
Contra	act Type	Conti	act Qnty.	Expiration Date	Current Usage	Total U	lsed	Quar	ntity Remain	ning	Salesperson	
										(	ORTIZ	

The Advertiser shall make payment within 15 days of the billing date indicated on Company's statement, and, in the event that it fails to make payment within such time, Company may reject advertising copy and / or immediately cancel this contract and Advertiser agrees to indemnify Company for all expenses incurred in connection with the collection of amounts payable under this contract, including but not limited to collection fees, attorney's fees and court costs. If this agreement is cancelled due to Advertiser's failure to make timely payment, Company may rebill the Advertiser for the outstanding balance due at the open or earned contract rate, whichever is applicable.

TO ENSURE PROPER CREDIT, PLEASE RETURN THE TOP SECTION AND INCLUDE YOUR CUSTOMER NUMBER ON REMITTANCE.

Customer Number	Name	Invoice Number	Amount Paid
RIV069	RIVERSIDE COUNTY-BOARD OF SUP.	0005315112	

The Desert Sun

750 N Gene Autry Trail Palm Springs, CA 92262 760-778-4578 / Fax 760-778-4731

### Certificate of Publication

State Of California ss: County of Riverside

### Advertiser:

RIVERSIDE COUNTY-BOARD OF SUP. 4080 LEMON ST **RIVERSIDE** CA 925013

2000715301

I am over the age of 18 years old, a citizen of the United States and not a party to, or have interest in this matter. I hereby certify that the attached advertisement appeared in said newspaper (set in type not smaller than non pariel) in each and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

Newspaper:

The Desert Sun

6/24/2015

6/25/2015

6/26/2015

6/27/2015

6/28/2015

I acknowledge that I am a principal clerk of the printer of The Desert Sun, printed and published weekly in the City of Palm Springs, County of Riverside, State of California. The Desert Sun was adjudicated a newspaper of general circulation on March 24, 1988 by the Superior Court of the County of Riverside, State of California Case No. 191236.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 28th day of June, 2015 in Palm Springs, California

Deglarant's Signature

No 0917

NOTICE TO BIDDERS

County of Riverside, herein called Owner, invites sealed proposals for:

Siurry Seal Project No 0917

District 4 Project No. C4-0009

District 5 Project No. C4-0010

Bid shall be delivered to the County of Riverside Transportation Department, 14th Street Annex, 3525 14th Street, Riverside, California 92501, telephone (951) 955-6780 not later than 2:00 p.m., on Wednesday, July 8, 2015 to be promptly opened in public at said address. Each bid shall be in accordance with plans, specifications and other contract documents, dated April 2015, and prepared by County of Riverside, whose address is same as the above, from whom they may be obtained upon deposit of \$30.00 per set with 11° x 17° plans, plus mailing costs. No refund. Prospective bidders may preview the plans, specifications and other contract documents at ocharge prior to purchase at the above noted location.

charge prior to purchase at the above noted location.

Pursuant to Labor Code section 1771.1, any Contractor bidding, or subcontractor to be listed on a bid proposal subject to Public Contract Code section 4104, shall not be qualified to bid after March 1, 2015, unless currently registered and qualified to perform public works pursuant to Labor Code section 1725.5. No Contractor or subcontractor may be awarded a contract or perform work on any contract for public work, after April 1, 2015, without proof of current registration with the Department of Industrial Relations pursuant to Labor Code section 1725.5 to perform public works.

The Contractor is required to have a Class "A" of "C-12" or "C-32" license at the time of bid submission.

sion. Engineering Estimate \$1,217,000 - \$1,278,000 \$ 243,000 - \$ 283,000 \$ 240,000 - \$ 280,000 \$ 28,000 - \$ 32,500

(Base Bid) (Alternate Bid 1A) (Alternate Bid 1B) (Alternate Bid 2) 10% 100%

Bid Bond Performance Bond Payment Bond Working Days

30 Working Days

Website: http://rctlma.org/trans/Contractors-Corner/Notices-Inviting-Bids

Dated: June 19, 2015 Kecia Harper-Ihem, Clerk of the Board By: Cecilia Gil, Board Assistant Published: 6/24, 25, 26, 27, 28/2015