

SECTION D - CONSTRUCTION DETAILS

1. SUMMARY OF WORK

A. GENERAL

The work to be performed under this Contract shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles for the project. It shall also include the furnishing of all transportation and services, including fuel, power, water, and essential communications, and for the performance of all labor, work, or other operations required for fulfillment of the Contract in strict accordance with the Contract Documents.

B. WORK COVERED BY CONTRACT DOCUMENTS

The Project is comprised, in general, of overlaying an existing two-lane roadway with the application of 0.17 feet of Type "A" hot mix asphalt concrete, over pavement reinforcing fabric, over a leveling coarse of 0.10± feet of Type "A" hot mix asphalt concrete, and including: traffic control; surface preparation; coordination of public notifications; application of herbicide; removal of existing vegetation, traffic striping, and markers; sweeping and cleaning of the roadways and adjacent paved shoulders to remove loose aggregate, soils, and debris; transportation and stockpiling, if necessary, of materials; placement and removal of temporary signage; installation of thermoplastic traffic stripes, thermoplastic pavement markings, and retroreflective and non-reflective pavement markers; and placement of aggregate base shoulder backing.

Such items or details not mentioned above that are required by the plans, Standard Specifications, Standard Plans, or these Special Provisions shall be performed, placed, constructed or installed under the identified project bid items.

The contractor shall also be required to establish temporary water pollution prevention and control measures in conformance to the applicable provisions of Section 7-1.01G "Water Pollution" of the Standard Specifications and these Special Provisions.

C. ORDER OF THE WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these Special Provisions.

The work shall be carried on at such places on the project and in such order or sequence as may be found necessary by the Engineer to expedite completion of the project. After work has begun on any portion of a designated part of the project, it shall be carried forward to its final completion as rapidly as practicable. The order and time to complete each portion of the project shall conform to the requirements of the contractor's schedule as submitted under the

C. ORDER OF THE WORK (Continued)

provisions of Section 8-1.04, "Progress Schedule" of the Standard Specifications and these Special Provisions, and as approved by the Engineer.

The Contractor shall furnish a computer generated schedule for the work, listing the dates on which sections of the street are to be closed to traffic for surfacing and lane controls are necessary. A minimum of one lane is to remain open to traffic during work hours and both lanes are to be open during non-work hours. See Section I "Maintaining Traffic" herein. The Contractor shall adhere diligently to the work schedule in the prosecution of the work. The Contractor must submit a traffic control plan for the project and all proposed revisions thereof to the Engineer for approval prior to implementation.

Following proper public notification as indicated herein, the first order of work shall be surface preparation and cleaning of the specified asphalt concrete pavement and shoulders in anticipation of placement of the leveling course and pavement reinforcing fabric, including the application of herbicide and removal of existing striping and pavement markers as specified in these Special Provisions.

D. WORK SEQUENCE/NOTIFICATIONS

At least 3 days prior to the beginning of any operations, the Contractor shall circulate printed form letters, as approved by the Engineer, to all affected property owners, businesses, and facilities, explaining the project, work to be done, and anticipated length of time any inconvenience will be caused.

Public Transportation and Emergency Services: The Contractor's attention is directed to the fact that no sustained interruption in the use of public transportation or emergency services can be accommodated. Prior to commencing traffic control for application of pavement treatments or re-striping operations, the Contractor shall contact the appropriate agency manager, provide them written preliminary notification of the intended schedule, and, if necessary, determine and prepare an alternate schedule for the Engineer's approval that provides acceptable minimal disruption as required by the agency manager. If a practical schedule can not be determined to the satisfaction of the agency manager, the Contractor shall notify and seek the assistance of the Engineer.

Businesses: No sustained interruption in access to adjacent businesses or use of the roadway for critical harvest access can be accommodated. Prior to commencing work in the vicinity of these businesses or agricultural operations, the Contractor shall contact the business owners or growers, provide them written preliminary notification of the intended schedule, and, if necessary, determine and prepare an alternate schedule or sequence of application for the Engineer's approval that provides acceptable minimal disruption. In all cases, the Contractor shall verify that each business owner/facility manager or grower has been notified and is aware of the final approved schedule.

D. WORK SEQUENCE/NOTIFICATIONS (Continued)

Neighborhood Notifications: For portions of the work that require restricted access to affected adjacent streets and driveways, the Contractor shall provide written notice to all affected residents and businesses 72 hours in advance of the work. Notifications shall be hung or otherwise affixed to the front door knob of each affected residence or business. Said notices shall be approved by the Engineer prior to distribution and shall be distributed to affected neighborhoods as indicated on the Contractor’s latest work schedule as approved by the Engineer.

The Contractor shall provide evidence of said notices by forwarding written verification to the Engineer, including dates at each address. If the scheduled work is not performed during this period, that particular work shall be rescheduled with 5 working days advance notice. The Contractor shall perform all necessary re-notification required by failure to meet the posted schedule.

The Contractor shall leave all traffic lanes open to traffic until starting the work during the scheduled times approved by the Engineer and all lanes shall be re-opened to traffic between the hours of 3:30 p.m. and 7:00 a.m., unless otherwise approved by the Engineer.

E. 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.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least **2 working days** (48 hours), but not more than 28 calendar days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure. Regional notification centers include but are not limited to the following:

<u>NOTIFICATION CENTER</u>	<u>TELEPHONE</u>
Underground Service Alert Northern California (USA)	1-800-227-2600 1-800-642-2444

The contract work shall be so conducted as to permit utility companies to maintain their services without interruption. Abandoned utility pipelines, telephone cables, and conduits, if encountered, shall be removed and disposed of off the job site. Attention is directed to the possible existence of storm drain and utility facilities, which are to remain and which are located within the area of work. The Contractor shall locate these facilities, work around them and protect them from damage during the course of his construction. Should the Contractor damage any of the existing facilities, they will be repaired and/or replaced immediately, any costs for repair and/or replacement shall be borne by the Contractor.

E. OBSTRUCTIONS (Continued)

In lieu of conflicting provisions of Section 8-1.10, full compensation for conforming to the above requirements or for delay or inconvenience to the Contractor's operations by reason of his conformance with such requirements, shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

F. COOPERATION

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

Work by public utility forces and/or Butte County Public Works Department crews may be underway within and/or adjacent to the limits of this contract at the time work under these Special Provisions is being performed. For the work herein specified, the Contractor shall cooperate with all forces engaged in performing other work as described above. Such forces may conduct their operations with as little inconvenience and delay as possible. The Contractor shall permit such forces passage through the work to transport materials and equipment to the site of their operations.

G. EXISTING HIGHWAY FACILITIES

The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these Special Provisions.

Existing roadside traffic signs that are in conflict with construction operations shall be removed and placed at the right-of-way line adjacent to the location where removed or at a location determined by the Engineer.

All bridges and box culverts located within the project limits shall have surface treatments as existing. If an overlay or build up of seal coat treatments is present on the deck surface, the asphalt surface shall be ground full width to as practical depth limits as possible to remove the overburden and the deck surface shall be resurfaced to conform to the roadway. If the original concrete deck is the existing wearing surface, no seal coat surface shall be placed and construction paper, or similar material, will be placed during application of the surface treatments to make a neat line transition.

Existing raised pavement markers and thermoplastic pavement markings shall be removed from the existing pavement prior application of the surface overlay treatments.

Disposal of the markers and any other exiting highway facility items shall be done in accordance with Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications and as determined by the Engineer.

G. EXISTING HIGHWAY FACILITIES (Continued)

All personnel covers, drain inlet covers, monument covers, and all other utility covers shall be protected from the Contractor's surfacing operations and appropriately adjusted following the completion of the surfacing operations by methods approved by the Engineer. All residual surfacing and shoulder backing materials that end up within drain inlets shall be promptly removed following sweeping of the pavement and prior to final acceptance of the project.

H. STOCKPILE SITES AND CONSTRUCTION ZONES

Determination of stockpile sites and the construction zone will be considered included as part of the bid items for "Clearing & Grubbing" and "Traffic Control" and no additional compensation will be allowed therefore. The sites for stockpiling materials shall be clean and free of objectionable materials and shall be located outside the street right-of-way. Arrangements for these sites shall be the responsibility of the Contractor. If on private property, a written agreement shall be provided to the Engineer prior to commencing operations. The Contractor shall also be responsible for any required permitting, including temporary use permits, if required. In terms of payments, actual stockpiling of materials shall be considered in the various bid items for surface treatments. In this regard, the Contractor shall clean up the stockpile areas prior to acceptance of the work. All spoils and debris of any nature shall be removed and the entire site shall be left in a clean, workmanlike appearance to the satisfaction of the Engineer.

For purposes of this contract the construction zone is defined to include the stockpile area, any ancillary storage yards, the area to be paved, and all streets and public rights-of-way in between these areas.

I. MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," 12, "Construction Area Traffic Control Devices," and 37-1.03, "Maintaining Traffic" of the Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in said Section 7-1.09.

The Contractor shall maintain access to thorough traffic during operations with traffic control measures indicated in Section 37-1.03, "Maintaining Traffic" of the Standard Specifications, except where it is otherwise specified in these Special Provisions or determined necessary and approved by the Engineer to intermittently close sections of the roadway to traffic for various safety issues and construction operations. The Contractor shall submit to the Engineer for approval a traffic-control plan that includes the proposed times and lengths of road closures. The Traffic Control Plan shall be submitted to the Engineer for approval at the pre-job conference and whenever changes are proposed by the Contractor. The Traffic Control Plan shall be considered as included in the contract lump sum price paid for the item "Traffic Control" and no additional compensation will be allowed therefore.

I. MAINTAINING TRAFFIC (Continued)

Illuminated traffic cones when used during the hours of darkness shall be affixed or covered with reflective cone sleeves as specified in Section 12-3.10, "Traffic Cones," of the Standard Specifications.

In addition to the existing warning and directional signs, the Contractor shall furnish the posts, mounting hardware and erect, within or adjacent to the limits of work, such construction supplemental warning and directional signs as ordered by the Engineer. These signs will be furnished by the County of Butte and stored in the maintenance yard in Oroville. The Contractor shall haul them from storage to the site of the work, frame and erect them. After erection, the Contractor shall maintain these and the existing signs and keep them in good repair until he has returned them to the storage location in Oroville at the completion of the Contract.

Except as provided above for County-furnished signs, the Contractor, at his/her own expense, shall furnish and maintain in good working order all lights, additional signs, barricades, flashers, Type III barricades, or other devices necessary for the protection of the public and traffic and as necessary to accomplish the necessary traffic restrictions. All safety devices, their maintenance, and use shall conform to the latest requirements of OSHA and shall conform to the applicable provisions of the "Work Area Traffic Control Handbook," California State Traffic Manual of Traffic Controls for Construction and Maintenance Work Zones (1990), and the "California Manual on Uniform Traffic Control Devices for Streets and Highways" (FHWA 2003 edition, as amended for use in California). It shall be the Contractor's responsibility to protect persons from injury and to avoid property damage. Adequate barricades, construction signs, flashers, changeable message boards, and other such safety devices, as required, shall be placed and maintained during the progress of the construction work until the project is completed. Whenever required, flagmen shall be provided to control traffic. The Contractor shall maintain business and property access as practicable as possible.

In lieu of payment as extra work as specified in Section 7-1.08, "Public Convenience," the cost of installing and removing signs and sign covers, the cost of accommodating public traffic prior to commencing and during construction operations, the cost of furnishing pilot cars, drivers and flagmen, the cost of furnishing, installing and maintaining signs, lights, flares, barricades, Type III barricades and other facilities for the safety, sole convenience and direction of public traffic through and around the work area, the cost of loading, hauling, unloading, erecting, maintaining and returning County-furnished signs, all as determined by the Engineer shall be considered as included in the contract lump sum price paid for the item "Traffic Control & Construction Area Signs," and no additional compensation will be allowed therefore.

A minimum of one sign stating the dates of anticipated construction shall be placed in the road right-of-way at the intersections on either end of the Riceton Highway to notify

and warn traffic the public on impending work. The signs are to be placed a minimum of two weeks prior to any anticipated work within the road right-of-way. The cost of

I. MAINTAINING TRAFFIC (Continued)

furnishing these signs shall be considered as included in the contract lump sum price paid for the item “Traffic Control,” and no additional compensation will be allowed therefore.

In lieu of Section 12-2.02, “Flagging Costs,” the cost of furnishing all flagmen and guards to provide for passage of public traffic through the work under the provisions in Section 7-1.08, “Public Convenience,” and Section 7-1.09, “Public Safety,” shall be considered as included in the contract lump sum price paid for the item “Traffic Control,” and no additional compensation will be allowed therefore.

Road and lane closures are allowed only during normal working hours such that all lanes shall be re-opened to traffic between the hours of 3:30 p.m. and 7:00 a.m., unless otherwise approved by the Engineer. Any extended hours required by the Contractor shall be approved by the Engineer. Within the “normal working hours,” specified herein, the Contractor shall place or remove the necessary traffic barricades, move equipment either on or off the job site, perform all resurfacing operations, including necessary rolling, curing, and placing temporary traffic markers prior to opening the roadway to traffic.

Construction operations shall be performed in such a manner that there will be at least **one 11-foot wide** lane open to public traffic at times of allowable traffic flow. At the end of each day’s work and when construction operations are suspended, a passageway shall be maintained through the work of sufficient width to provide for a minimum of **two 11-foot-wide traffic lanes** for public traffic. Where determined necessary and approved by the Engineer to intermittently close sections of the roadway to traffic for short intervals of time for various unanticipated safety issues or approved construction operations, the Contractor shall provide adequate warning, as approved by the Engineer. This action is presently unanticipated with this project due is applicable to approved short term temporary closures only. Long term closure of the roadway would require approved noticing and detour route signing placed in advance of the closure. Typically, long term closure would only be contemplated in the event of an emergency and would require prior approval by the Engineer.

The Contractor shall install and maintain temporary raised pavement markers and stop bars following the removal of existing striping to until the roadway surface is ready for permanent striping and raised pavement markers to be installed.

Full compensation for conforming to the requirements of this article shall be considered as included in the contract lump sum price paid for the item “Traffic Control” and no additional compensation will be allowed therefore

1) Traffic Control System for Lane Closure

A traffic control system shall consist of closing traffic lanes in accordance with the provisions of Section 12, “Construction Area Traffic Control Devices,” of the Standard

Specifications and the provisions under "Maintaining Traffic," elsewhere in these Special Provisions.

I. MAINTAINING TRAFFIC (Continued)

If any component in the traffic control system is displaced, or ceases to operate or function as specified, or as directed by the Engineer, from any cause, during the progress of the work, the Contractor shall immediately repair the component to its original condition or replace the component and shall restore the component to its original location.

STATIONARY TYPE LANE CLOSURE

When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right-of-way.

Utilizing a pilot car will be at the option of the Contractor. If the Contractor elects to use a pilot car, cones along the centerline need not be placed. The pilot car shall have radio contact with personnel in the work area, and the maximum speed of the pilot car through the traffic control zone shall be 25 miles per hour.

MOVING TYPE LANE CLOSURE

Flashing arrow signs used in moving lane closures shall be truck-mounted. Flashing arrow signs shall be in the caution display mode when used on two-lane highways. Changeable message signs used in moving lane closure operations shall conform to Section 12-3.12, "Portable Changeable Message Signs," of the Standard Specifications, except the signs shall be truck-mounted and the full operation height of the bottom of the sign may be less than 7 feet above the ground, but should be as high as practicable.

Truck-mounted crash cushions (TMCC) for use in moving lane closures shall be any of the following approved models, or equal:

- (1) **Hexfoam TMA Series 3000 and
Alpha 1000 TMA Series 1000 and
Alpha 2001 TMA Series 2001**

Manufacturer

Energy Absorption Systems, Inc.
One East Wacker Drive
Chicago, IL 60601-2076
Phone (312) 467-6750

Distributor (Northern)

Traffic Control Service, Inc.
8585 Thys Court
Sacramento, CA 95828
Phone (800) 884-8274

Distributor (Southern)

Traffic Control Service, Inc.
1881 Betmor Lane
Anaheim, CA 92805

MAINTAINING TRAFFIC (Continued)

(2) Cal T-001 Model 2 or Model 3:

Manufacturer

Hexcel Corporation
11711 Dublin Boulevard
P.O. Box 2312
Dublin, CA 94568
Phone: (510) 828-4200

Distributor

Hexcel Corporation
11711 Dublin Boulevard
P.O. Box 2312
Dublin, CA 94568
Phone: (510) 828-4200

(3) Renco Rengard Model Nos. CAM 8-815 and RAM 8-815

Manufacturer

Renco, Inc.
1582 Pflugerville Loop Road
P.O. Box 730
Pflugerville, TX 78660-0703
Phone (800) 654-8182

Distributor

Renco, Inc.
1582 Pflugerville Loop Road
P.O. Box 730
Pflugerville, TX 78660-0703
Phone (800) 654-8182

Each TMCC shall be individually identified with the manufacturer's name, address, TMCC model number, and a specific serial number. The names and numbers shall each be a minimum ½ inch high, and located on the left (street) side at the lower front corner. The TMCC shall have a message next to the name and model number in ½ inch high letters that states, "The bottom of this TMCC shall be ____ inches \pm ____ inches above the ground at all points for proper impact performance." Any TMCC, which is damaged or appears to be in poor condition, shall not be used unless recertified by the manufacturer. The Engineer shall be the sole judge as to whether used TMCCs supplied under this contract need recertification. The manufacturer to meet the requirements for TMCCs in accordance with the standards established by the Transportation Laboratory Structures Research Section shall certify each unit.

Approvals for new TMCC designs proposed as equal to the above-approved models shall be in accordance with the procedures, (including crash testing), established by the Transportation Laboratory Structures Research Section. For information regarding submittal of new designs for evaluation contact:

**Transportation Laboratory
Structures Research Section
P. O. Box 19128
5900 Folsom Boulevard
Sacramento, CA 95819**

I. MAINTAINING TRAFFIC (Continued)

New TMCCs proposed as equal to approved TMCCs or approved TMCCs determined by the Engineer that need recertification shall not be used until approved or recertified by the Transportation Laboratory Structures Research Section.

2) Temporary Laneline and Centerline Delineation

Whenever the existing roadway striping is obliterated, covered, or obscured, the minimum laneline and centerline delineation to be provided shall consist entirely of temporary reflective raised pavement markers placed at longitudinal intervals of not more than **24 feet**. The temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area, as determined by the Engineer and shall be placed to maintain roadway centerline, laneline, and other traffic markings immediately following removal of the existing striping and prior to opening roadways with new surface treatments to traffic.

Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place temporary pavement markers.

Temporary reflective raised pavement markers shall be one of temporary pavement markers listed for short term day/night use (14 days or less) in "Prequalified and Tested Signing and Delineation Materials," mentioned elsewhere in these Special Provisions, or as approved by the Engineer.

Full compensation for furnishing, placing, and maintaining the temporary reflective raised pavement markers used for temporary laneline and/or centerline delineation shall be considered as included in the contract prices paid for the item "Traffic Control," and no additional compensation will be made therefore.

J. CLEAN-UP

The Contractor shall clean up the job site prior to acceptance of the work. All dirt, spoil, and debris of any nature shall be removed and the entire site shall present a clean, workmanlike appearance to the satisfaction of the Engineer. Any damage to paint work, caused from spillage, or splattering from prime coating, paving or seal coating operations shall be corrected to the satisfaction of the Engineer

2. MATERIALS

Attention is directed to Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

The Contractor shall furnish all materials as described in the items of work or as otherwise required to complete the work under this contract.

A. Weighing and Measuring Devices

The Contractor and/or suppliers shall bear the expense of all service fees for testing and approving of commercial and non-commercial weighing, measuring, and metering devices. The cost of the equipment, labor, and materials furnished by the Contractor to assist in the testing of the weighing, measuring or metering devices will be considered as included in the contract prices paid for the various items of work requiring said weighing, measuring, or metering and no separate payment will be made therefore.

B. Aggregates

Attention is directed to 26-1.02, "Materials," and 39-2.02, "Aggregate," respectively, of the Standard Specifications.

If the results of either or both the aggregate grading and Sand Equivalent tests do not meet the requirements specified for "Contract Compliance," the material, which is represented by these tests, shall be removed. However, if requested by the Contractor and approved by the Engineer, said material may remain in place and the Contractor shall pay to the State (County) the following amounts for all such material left in place:

<u>Item</u>	<u>Adjustment</u>
Aggregate Base	\$1.00/Ton
Asphalt Concrete	\$1.75/Ton

The Department may deduct such amounts from any moneys due, or that may become due, to the Contractor under the contract.

C. Surface Mining and Reclamation Act

Attention is directed to the Surface Mining and Reclamation Act of 1975, commencing in Public Resources Code, Mining and Geology, Section 2710, which establishes regulations pertinent to surface mining operations.

Material from the mining operations furnished for this project shall only come from permitted sites in compliance with the Surface Mining Reclamation Act of 1975.

The requirements of this section shall apply to all materials furnished for the project, except for acquisition of materials in conformance with Section 4-1.05, "Use of Materials Found on the Work," of the Standard Specifications.

D. Pre-qualified & Tested Signing & Delineation Materials

The California Department of Transportation maintains a list of Pre-qualified and Tested Signing and Delineation materials. The Engineer shall not be precluded from sampling and testing products on the list of Pre-qualified and Tested Signing and Delineation Materials.

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

The manufacturer of products on the list of Pre-qualified and Tested Signing and Delineation materials shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied.

For those categories of materials included in the list of Pre-qualified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products not included in the list of Pre-qualified and Tested Signing and Delineation Materials may be used in the work, provided they conform to the requirements of the Standard Specifications.

Materials and products may be added to the list of Pre-qualified and Tested Signing and Delineation Materials if the manufacture submits a New Product Information Form to the New Product Coordinator at the Transportation Laboratory. Upon a Departmental request for samples, sufficient samples shall be submitted to permit performance of required tests. Approval of materials or products will depend upon compliance with the specifications, tests the Department may elect to perform and approval by the Engineer.

The following is a partial listing of previously approved pre-qualified and tested delineation materials and products:

MATERIALS AND PRODUCTS

Pavement markers, retroreflective
Pavement markers, Temporary Type
Retroreflective sheeting for markers and delineators
Retroreflective sheeting for traffic cone sleeves

PAVEMENT MARKERS, PERMANENT TYPE

Retroreflective With Abrasion Resistant Surface (ARS)

1. Apex, Model 921AR (4" x 4")
2. Ennis Paint, Models C88 (4" x 4"), 911 (4" x 4") and 953 (2.75" x 4.5")
3. Ray-O-Lite, Model "AA" ARS (4" x 4")
4. 3M Series 290 (3.5" x 4")
5. 3M Series 290 PSA, with pressure sensitive adhesive pad (3.5" x 4")

Retroreflective With Abrasion Resistant Surface (ARS)

(for recessed applications only)

1. Ennis Paint, Model 948 (2.3" x 4.7")
2. Ennis Paint, Model 944SB (2" x 4")*
3. Ray-O-Lite, Model 2002 (2" x 4.6")
4. Ray-O-Lite, Model 2004 ARS (2" x 4")*

*For use only in 4.5 inch wide (older) recessed slots

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

Non-Reflective, 4-inch Round

1. Apex Universal (Ceramic)
2. Apex Universal, Models 929 (ABS) and 929PP (Polypropylene)
3. Glowlite, Inc. (Ceramic)
4. Hi-Way Safety, Inc., Models P20-2000W and 2001Y (ABS)
5. Interstate Sales, "Diamond Back" (Polypropylene)
6. Novabrite Models Cdot (White) Cdot-y (Yellow), Ceramic
7. Novabrite Models Pdot-w (White) Pdot-y (Yellow), Polypropylene
8. Three D Traffic Works TD10000 (ABS), TD10500 (Polypropylene)

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary Markers For Long Term Day/Night Use (180 days or less)

1. Vega Molded Products "Temporary Road Marker" (3" x 4")

Temporary Markers For Short Term Day/Night Use (14 days or less)

(For seal coat or chip seal applications, clear protective covers are required)

1. Apex Universal, Model 932
2. Filtrona Extrusion, Models T.O.M., T.R.P.M., and "HH" (High Heat)
3. Hi-Way Safety, Inc., Model 1280/1281
4. Glowlite, Inc., Model 932

STRIPING AND PAVEMENT MARKING MATERIAL

Permanent Traffic Striping and Pavement Marking Tape

1. Advanced Traffic Marking, Series 300 and 400
2. Brite-Line, Series 1000
3. Brite-Line, "DeltaLine XRP"
4. Swarco Industries, "Director 35" (For transverse application only)
5. Swarco Industries, "Director 60"
6. 3M, "Stamark" Series 380 and 5730
7. 3M, "Stamark" Series 420 (For transverse application only)

Temporary (Removable) Striping and Pavement Marking Tape (180 days or less)

1. Advanced Traffic Marking, Series 200
2. Brite-Line, Series 100
3. Garlock Rubber Technologies, Series 2000
4. P.B. Laminations, Aztec, Grade 102
5. Swarco Industries, "Director-2"
6. Trelleborg Industries, R140 Series
7. 3M Series 620 "CR", and Series A750
8. 3M Series A145, Removable Black Line Mask
(Black Tape: for use only on Hot mix asphalt surfaces)

9. Advanced Traffic Marking Black "Hide-A-Line"
(Black Tape: for use only on Hot mix asphalt surfaces)

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

10. Brite-Line "BTR" Black Removable Tape
(Black Tape: for use only on Hot mix asphalt surfaces)
11. Trelleborg Industries, RB-140
(Black Tape: for use only on Hot mix asphalt surfaces)

Preformed Thermoplastic (Heated in place)

1. Flint Trading Inc., "Hot Tape"
2. Flint Trading Inc., "Premark Plus"
3. Ennis Paint Inc., "Flametape"

Ceramic Surfacing Laminate, 6" x 6"

1. Highway Ceramics, Inc.

CLASS 1 DELINEATORS

One Piece Driveable Flexible Type, 66-inch

1. Filtrona Extrusion, "Flexi-Guide Models 400 and 566"
2. Carsonite, Curve-Flex CFRM-400
3. Carsonite, Roadmarker CRM-375
4. FlexStake, Model 654 TM
5. GreenLine Model CGD1-66

Special Use Type, 66-inch

1. Filtrona Extrusion, Model FG 560 (with 18-inch U-Channel base)
2. Carsonite, "Survivor" (with 18-inch U-Channel base)
3. Carsonite, Roadmarker CRM-375 (with 18-inch U-Channel base)
4. FlexStake, Model 604
5. GreenLine Model CGD (with 18-inch U-Channel base)
6. Impact Recovery Model D36, with #105 Driveable Base
7. Safe-Hit with 8-inch pavement anchor (SH248-GP1)
8. Safe-Hit with 15-inch soil anchor (SH248-GP2) and with 18-inch soil anchor (SH248-GP3)

Surface Mount Type, 48-inch

1. Bent Manufacturing Company, Masterflex Model MF-180EX-48
2. Carsonite, "Channelizer"
3. FlexStake, Models 704, 754 TM, and EB4
4. Impact Recovery Model D48, with #101 Fixed (Surface-Mount) Base
5. Three D Traffic Works "Channelflex" ID No. 522248W

CHANNELIZERS

Surface Mount Type, 36-inch

1. Bent Manufacturing Company, Masterflex Models MF-360-36 (Round) and MF-180-36 (Flat)

2. Filtrona Extrusion, Flexi-Guide Models FG300PE, FG300UR, and FG300EFX

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

3. Carsonite, "Super Duck" (Round SDR-336)

4. Carsonite, Model SDCF03601MB "Channelizer"

5. FlexStake, Models 703, 753 TM, and EB3

6. GreenLine, Model SMD-36

7. Hi-way Safety, Inc. "Channel Guide Channelizer" Model CGC36

8. Impact Recovery Model D36, with #101 Fixed (Surface-Mount) Base

9. Safe-Hit, Guide Post, Model SH236SMA

10. Three D Traffic Works "Boomerang" ID No. 522053W

Lane Separation System

1. Filtrona Extrusion, "Flexi-Guide (FG) 300 Curb System"

2. Qwick Kurb, "Klemmfix Guide System"

3. Dura-Curb System

CONICAL DELINEATORS, 42-inch

(For 28-inch Traffic Cones, see Standard Specifications)

1. Bent Manufacturing Company "T-Top"

2. Plastic Safety Systems "Navigator-42"

3. TrafFix Devices "Grabber"

4. Three D Traffic Works "Ringtop" TD7000, ID No. 742143

5. Three D Traffic Works, TD7500

OBJECT MARKERS

Type "K", 18-inch

1. Filtrona Extrusion, Model FG318PE

2. Carsonite, Model SMD 615

3. FlexStake, Model 701 KM

4. Safe-Hit, Model SH718SMA

Type "K-4" / "Q" Object Markers, 24-inch

1. Bent Manufacturing "Masterflex" Model MF-360-24

2. Filtrona Extrusion, Model FG324PE

3. Carsonite, "Channelizer"

4. FlexStake, Model 701KM

5. Safe-Hit, Models SH824SMA_WA and SH824GP3_WA

6. Three D Traffic Works ID No. 531702W and TD 5200

7. Three D Traffic Works ID No. 520896W

**CONCRETE BARRIER MARKERS AND
TEMPORARY RAILING (TYPE K) REFLECTORS**

Impactable Type

1. ARTUK, "FB"
2. Filtrona Extrusion, Models PCBM-12 and PCBM-T12
3. Duraflex Corp., "Flexx 2020" and "Electriflexx"

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

4. Hi-Way Safety, Inc., Model GMKRM100
5. Plastic Safety Systems "BAM" Models OM-BARR and OM-BWAR
6. Three D Traffic Works "Roadguide" Model TD 9304

Non-Impactable Type

1. ARTUK, JD Series
2. Plastic Safety Systems "BAM" Models OM-BITARW and OM-BITARA
3. Vega Molded Products, Models GBM and JD
4. Plastic Vacuum Forming, "Cap-It C400"

METAL BEAM GUARD RAIL POST MARKERS

(For use to the left of traffic)

1. Filtrona Extrusion, "Mini" (3" x 10")
2. Creative Building Products, "Dura-Bull, Model 11201"
3. Duraflex Corp., "Railrider"
4. Plastic Vacuum Forming, "Cap-It C300"

CONCRETE BARRIER DELINEATORS, 16-inch

(For use to the right of traffic)

1. Filtrona Extrusion, Model PCBM T-16
2. Safe-Hit, Model SH216RBM

CONCRETE BARRIER-MOUNTED MINI-DRUM (10" x 14" x 22")

1. Stinson Equipment Company "SaddleMarker"

GUARD RAILING DELINEATOR

(Place top of reflective element at 48 inches above plane of roadway)

Wood Post Type, 27-inch

1. Filtrona Extrusion, FG 427 and FG 527
2. Carsonite, Model 427
3. FlexStake, Model 102 GR
4. GreenLine GRD 27
5. Safe-Hit, Model SH227GRD
6. Three D Traffic Works "Guardflex" TD9100
7. New Directions Mfg, NDM27

Steel Post Type

1. Carsonite, Model CFGR-327

RETROREFLECTIVE SHEETING

Channelizers, Barrier Markers, and Delineators

1. Avery Dennison T-6500 Series (For rigid substrate devices only)
2. Avery Dennison WR-7100 Series
3. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

4. Reflexite, PC-1000 Metalized Polycarbonate
5. Reflexite, AC-1000 Acrylic
6. Reflexite, AP-1000 Metalized Polyester
7. Reflexite, Conformalight, AR-1000 Abrasion Resistant Coating
8. 3M, High Intensity

Traffic Cones, 4-inch and 6-inch Sleeves

1. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
2. Reflexite, Vinyl, "TR" (Semi-transparent) or "Conformalight"
3. 3M Series 3840
4. Avery Dennison S-9000C

Drums

1. Avery Dennison WR-6100
2. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
3. Reflexite, "Conformalight", "Super High Intensity" or "High Impact Drum Sheeting"
4. 3M Series 3810

Barricades: Type I, Medium-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Nippon Carbide Industries, CN8117
2. Avery Dennison, W 1100 series
3. 3M Series CW 44

Barricades: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, W-2100 Series

Signs: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, T-2500 Series
2. Nippon Carbide Industries, Nikkalite 18000

Signs: Type III, High-Intensity (Typically Encapsulated Glass-Bead Element)

1. Avery Dennison, T-5500A and T-6500 Series
2. Nippon Carbide Industries, Nikkalite Brand Ultralite Grade II
3. 3M 3870 and 3930 Series

Signs: Type IV, High-Intensity (Typically Unmetallized Microprismatic Element)

1. Avery Dennison, T-6500 Series
2. Nippon Carbide Industries, Crystal Grade, 94000 Series
3. Nippon Carbide Industries, Model No. 94847 Fluorescent Orange
4. 3M Series 3930 and Series 3924S

Signs: Type VI, Elastomeric (Roll-Up) High-Intensity, without Adhesive

1. Avery Dennison, WU-6014
2. Novabrite LLC, "Econobrite"
3. Reflexite "Vinyl"

D. Pre-qualified & Tested Signing & Delineation Materials (Continued)

4. Reflexite "SuperBright"
5. Reflexite "Marathon"
6. 3M Series RS20

Signs: Type VII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

1. 3M Series 3924S, Fluorescent Orange
2. 3M LDP Series 3970

Signs: Type VIII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

1. Avery Dennison, T-7500 Series
2. Avery Dennison, T-7511 Fluorescent Yellow
3. Avery Dennison, T-7513 Fluorescent Yellow Green
4. Avery Dennison, W-7514 Fluorescent Orange
5. Nippon Carbide Industries, Nikkalite Crystal Grade Series 92800
6. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92847 Fluorescent Orange

Signs: Type IX, Very-High-Intensity (Typically Unmetallized Microprismatic Element)

1. 3M VIP Series 3981 Diamond Grade Fluorescent Yellow
2. 3M VIP Series 3983 Diamond Grade Fluorescent Yellow/Green
3. 3M VIP Series 3990 Diamond Grade
4. Avery Dennison T-9500 Series
5. Avery Dennison, T9513, Fluorescent Yellow Green
6. Avery Dennison, W9514, Fluorescent Orange

SPECIALTY SIGNS

1. Reflexite "Endurance" Work Zone Sign (with Semi-Rigid Plastic Substrate)

ALTERNATIVE SIGN SUBSTRATES

Fiberglass Reinforced Plastic (FRP) and Expanded Foam PVC

1. Fiber-Brite (FRP)
2. Sequentia, "Polyplate" (FRP)
3. Inteplast Group "InteCel" (0.5 inch for Post-Mounted CZ Signs, 48-inch or less)(PVC)

Aluminum Composite, Temporary Construction Signs Only

1. Alcan Composites "Dibond Material, 80 mils"
2. Mitsubishi Chemical America, Alpolic 350

**Note: For questions regarding this listing contact the:
Division of Signs & Delineation, Traffic Operations, (916) 654-5869 or
Transportation Laboratory, (916) 227-7289, 8-498-7289**

3. ITEMS OF WORK:

A. GENERAL

Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of work as specified and shown on the Drawings, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety. No separate payment will be made for any item of work that is not specifically set forth in the Bid Schedule(s), and all costs therefore shall be included in the prices named in the Bid Schedule(s) for the various appurtenant items of work.

Any and all items and/or work shown on the Drawings or indicated in the Contract Documents and not included in a description of a specific bid item shall be included by the Bidder in one or more appurtenant bid items. This includes, but is not limited to, such items as: scheduling and coordination; dust, debris, and noise control; protection of curing materials; replacement of damaged improvements and materials, provision of all safety requirements; and all work and materials required to provide public convenience and safety, such as flaggers, barricades, lights, vehicular detours, and pedestrian access walkways.

B. DESCRIPTION, MEASUREMENT, AND PAYMENT

Bid Item No. 1) Traffic Control:

Traffic Control shall conform to the provisions in Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," and Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and herein in Section D – "Construction Details", including, but not limited to, Subsections 1C - "Order of Work", 1D – "Work Sequence/Notifications", 1G – "Existing Highway Facilities", 1I - "Maintaining Traffic", and Subsection 2 – "Materials" of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in said Section 7-1.09.

Full compensation for furnishing and placing all materials and for implementing all traffic control measures to the various phases of work, including: preparation, implementation, and coordination of a traffic control plan, as approved by the Engineer; notification of property owners; and furnishing all flagging and traffic control shall be considered as included in the lump sum price paid for the item "Traffic Control" and no additional compensation will be allowed therefore.

Bid Item No. 2) Clearing and Grubbing:

Prior to the application of the leveling course, pavement reinforcing fabric, or other resurfacing treatments to the roadway, the Contractor shall perform the following surface preparation:

Apply herbicide at least 10 days prior to the initial surface treatment operation, or as directed by the manufacturer of the approved herbicide. Herbicides shall be applied in conformance with the applicable provisions of Section 7-1.01H "Use of Pesticides" and Section 20-4.026 "Pesticides" of the Standard Specifications and these Special Provisions, unless otherwise specified by the Engineer. Reward and Round Up are pre-approved herbicides for use in areas where there is no standing water. All other herbicides shall be submitted by the Contractor for approval by the Engineer and shall be certified for use in the State of California for the specific use intended.

The application of the herbicide shall be performed in accordance with all applicable regulations. Any and all fines or clean-up costs for unlawful misuse or discarding of herbicides shall be the sole responsibility of the Contractor. Mixtures and spread rates for the herbicides shall be determined by the manufacturer's specifications. Wash down of equipment or discarding of herbicides shall not enter the catch basins, positive drainage facilities, or adjacent riparian areas.

Remove all existing thermoplastic striping, thermoplastic legends and raised pavement markers within the surface treatment limits. After removing the thermoplastic, the Contractor shall fog seal the newly exposed pavement surface with SS-1 or SS-1h emulsion. When removing the raised pavement markers the Contractor shall remove excessive adhesive left on pavement following the removal of raised pavement markers. Removal shall be done to the satisfaction of the Engineer. Areas that have been patched within the past 60 days and not already treated with a sealant shall be fog sealed by the Contractor as part of the bid item for "Clearing and Grubbing." If traffic is to be put back on the roadway surface prior to application of the resurfacing treatments, the Contractor shall install temporary lane line and centerline delineation in accordance to Subsection 11 - "Maintaining Traffic", and Subsection 2 - "Materials" of these Special Provisions.

Immediately prior to any resurfacing treatment operations, the Contractor shall remove any and all remaining vegetation, debris, oil, and grease spots within the limits of the resurfacing treatment and sweep the entire surface with vacuum assisted power brooms on residential streets and kick brooms on rural roads and highways, when approved by the Engineer.

Existing asphalt concrete dikes, aprons, and ditches located within the project limits shall also be cleaned of all soil and debris, treated with herbicide, and cleared of vegetation as part of the bid item for "Clearing and Grubbing" prior to the application of any resurfacing treatments.

Bid Item No. 2) Clearing and Grubbing: (Continued)

The Contractor shall grade the existing gravel shoulders as practically as possible to a limit of 3 feet from the edge of pavement without disturbing riparian areas in order to remove objectionable vegetation and other debris. The removed vegetation and other debris shall be disposed of off the roadway right of way.

The pavement markers, vegetation, and graded shoulder debris shall be removed from the pavement area and disposed of outside the highway right of way in accordance with Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications and as determined by the Engineer.

Full compensation for determination of stockpile sites and the maintenance of and clean up thereof as described in Subsection 1H – "Stockpile Sites and Construction Zones" and Subsection 1J "Clean-up" shall be considered included as part of the bid items for "Clearing & Grubbing" and no additional compensation will be allowed therefore.

Full compensation for the above described surface preparation, including furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved, shall be considered as included in the lump sum price paid for the item "Clearing and Grubbing" and no additional compensation will be allowed therefore.

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:

Water pollution control work shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications and these Special Provisions.

Water pollution control work shall conform to the applicable requirements in the "*Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual*" and the "*Construction Site Best Management Practices (BMPs) Manual*," and addenda thereto issued up to, and including, the date of advertisement of the project. These manuals are hereinafter referred to respectively as the "Preparation Manual" and the "Construction Site BMPs Manual," and collectively, as the "Manuals." Copies of the Manuals may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520, and may also be obtained from the Department's Internet website at:

<http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>

The Contractor shall know and fully comply with applicable provisions of the Manuals, and Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from both the project site and areas of disturbance outside the project limits during construction. Attention is directed to Sections 7-1.01, "Laws to be Observed," and 7-1.12, "Indemnification and Insurance," of the Standard Specifications, and these Special Provisions.

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

Water pollution control requirements shall apply to storm water and non-storm water discharges from areas outside the project site which are directly related to construction activities for this contract including, but not limited to, asphalt batch plants, material borrow areas, concrete plants, staging areas, storage yards and access roads. The Contractor shall comply with the Manuals for those areas and shall implement, inspect and maintain the required water pollution control best management practices. Installing, inspecting and maintaining water pollution control practices on areas outside the roadway right of way not specifically arranged and provided for by the County for the execution of this contract, will not be paid for.

The Contractor shall be responsible for penalties assessed or levied on the Contractor or the County as a result of the Contractor's failure to comply with the provisions in this section for "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Manuals, and Federal, State and local regulations and requirements as set forth therein.

Penalties as used in this section shall include fines, penalties and damages, whether proposed, assessed, or levied against the County or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies, or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Manuals, or applicable laws, regulations, permits, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

RETENTION OF FUNDS

Notwithstanding any other remedies authorized by law, the County may retain money due the Contractor under the contract, in an amount determined by the County, up to and including the entire amount of penalties proposed, assessed, or levied as a result of the Contractor's violation of the Manuals, or Federal or State law, regulations, permits, or requirements. Funds may be retained by the County until final disposition has been made as to the Penalties. The Contractor shall remain liable for the full amount of Penalties until such time as they are finally resolved with the entity seeking the Penalties.

Retention of funds for failure to conform to the provisions in this section for "Water Pollution Control," shall be in addition to the other retention amounts required by the contract. The amounts retained for the Contractor's failure to conform to provisions in this section will be released for payment on the next monthly estimate for partial payment following the date when an approved WPCP has been implemented and maintained, and when water pollution has been adequately controlled, as determined by the Engineer.

When a regulatory agency identifies a failure to comply with the Manuals, or other Federal, State or local requirements, the County may retain money due the Contractor, subject to the following:

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

A. The County will give the Contractor 30 day's notice of the County's intention to retain funds from partial payments which may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.

B. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.

C. If the County has retained funds, and it is subsequently determined that the County is not subject to the entire amount of the costs and liabilities assessed or proposed in connection with the matter for which the retention was made, the County shall be liable for interest on the amount retained for the period of the retention. The interest rate payable shall be 6 percent per annum.

During the first estimate period that the Contractor fails to conform to the provisions in this section for "Water Pollution Control," the County may retain an amount equal to 25 percent of the estimated value of the contract work performed.

The Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor, or otherwise access the project site or the Contractor's records pertaining to water pollution control work. The Contractor and the County shall provide copies of correspondence, notices of violations, enforcement actions, or proposed fines by regulatory agencies to the requesting regulatory agency.

**WATER POLLUTION CONTROL PROGRAM PREPARATION, APPROVAL,
AND AMENDMENTS**

As part of the water pollution control work, a Water Pollution Control Program (WPCP) is required for this contract. The WPCP shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications, the applicable requirements in the Manuals, and these Special Provisions. Upon the Engineer's approval of the WPCP, the WPCP shall be considered to fulfill the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications for development and submittal of a Water Pollution Control Program.

No work having potential to cause water pollution shall be performed until the WPCP has been approved by the Engineer. Approval shall not constitute a finding that the WPCP complies with applicable requirements of the Manuals and applicable Federal, State and local laws, regulations, and requirements.

The Contractor shall designate a Water Pollution Control Manager. The Water Pollution Control Manager shall be responsible for the preparation of the WPCP and required modifications or amendments, and shall be responsible for the implementation and adequate

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

functioning of the various water pollution control practices employed. The Contractor may designate different Water Pollution Control Managers to prepare the WPCP and to implement the water pollution control practices. The Water Pollution Control Managers shall serve as the primary contact for issues related to the WPCP or its implementation. The Contractor shall assure that the Water Pollution Managers have adequate training and qualifications necessary to prepare the WPCP, implement and maintain water pollution control practices.

Within 10 working days after the approval of the contract, the Contractor shall submit 3 copies of the draft WPCP to the Engineer. The Engineer will have 10 working days to review the WPCP. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the WPCP within 10 working days of receipt of the Engineer's comments. The Engineer will have 5 working days to review the revisions. Upon the Engineer's approval of the WPCP, 4 approved copies of the WPCP, incorporating the required changes, shall be submitted to the Engineer. In order to allow construction activities to proceed, the Engineer may conditionally approve the WPCP while minor revisions are being completed. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for resulting losses, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications, and these Special Provisions.

In addition to storm water and non-storm water discharges, the WPCP shall incorporate pollution control practices in the following categories:

- A. Soil stabilization.
- B. Sediment control.
- C. Wind erosion control.
- D. Tracking control.
- E. Non-storm water management.
- F. Waste management and materials pollution control.

The Contractor shall develop a Water Pollution Control Schedule that describes the timing of grading or other work activities that could affect water pollution. The Water Pollution Control Schedule shall be updated by the Contractor to reflect changes in the Contractor's operations that would affect the necessary implementation of water pollution control practices.

The Contractor shall complete the BMP checklists for each of the six categories presented in Section 3 of the Preparation Manual and shall incorporate the completed checklists and water pollution control practices into Sections 30.1, 30.2, and 30.3 of the WPCP. Water pollution control practices include the "Minimum Requirements" and other Contractor-selected water pollution control practices from the BMP checklists and "Project-Specific

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

Minimum Requirements" identified in the Water Pollution Control Cost Break-Down of this section.

The WPCP shall include, but not be limited to, the items described in the Manuals and related information contained in the contract documents.

The Contractor shall prepare an amendment to the WPCP when there is a change in construction activities or operations which may affect the discharge of pollutants to surface waters, ground waters, municipal storm drain systems, or when the Contractor's activities or operations violate Federal, State or local regulations, or when directed by the Engineer. Amendments shall identify additional water pollution control practices or revised operations, including those areas or operations not identified in the initially approved WPCP. Amendments to the WPCP shall be prepared and submitted for review and approval within a time approved by the Engineer, but in no case longer than the time specified for the initial submittal and review of the WPCP.

The Contractor shall keep one copy of the approved WPCP and approved amendments at the project site. The WPCP shall be made available upon request by a representative of the Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental Protection Agency, or the local storm water management agency. Requests by the public shall be directed to the Engineer.

COST BREAK-DOWN

The Contractor shall include a Water Pollution Control Cost Break-Down in the WPCP which itemizes the contract lump sum for water pollution control work. The Contractor shall use the Water Pollution Control Cost Break-Down provided in this section as the basis for the cost break-down submitted with the WPCP. The Contractor shall use the Water Pollution Control Cost Break-Down to identify items, quantities and values for water pollution control work, excluding Temporary Water Pollution Control Practices for which there is a separate bid item. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-down submitted with the WPCP. **Partial payment for the item of "Water Pollution Control" will not be made until the Water Pollution Control Cost Break-Down is approved by the Engineer.**

Line items indicated in the Water Pollution Control Cost Break-Down in this section with a specified Estimated Quantity shall be considered a "Project-Specific Minimum Requirement." The Contractor shall incorporate the items with Contractor designated quantities and values into the Water Pollution Control Cost Break-Down submitted with the WPCP.

Line items indicated in the Water Pollution Control Cost Break-Down in this section without a specified Estimated Quantity shall be considered by the Contractor for selection to meet the applicable "Minimum Requirements" as defined in the Manuals, or for other water

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

pollution control work as identified in the BMP checklists presented in Section 3 of the Preparation Manual. In the Water Pollution Control Cost Break-Down submitted with the WPCP, the Contractor shall list only those water pollution control practices selected for the project, including quantities and values required to complete the work for those items.

The sum of the amounts for the items of work listed in the Water Pollution Control Cost Break-Down shall be equal to the contract lump sum price bid for water pollution control.

WATER POLLUTION CONTROL COST BREAK-DOWN

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
SS-4	Hydroseeding	Acre			
SS-6	Straw Mulch	Acre			
SC-5	Fiber Rolls	LF			
SC-6	Gravel Bag Berm	EA			
SC-7	Street Sweeping and Vacuuming	LS			
SC-10	Storm Drain Inlet Protection	LS			
NS-3	Paving and Grinding Operations	LS			
NS-6	Illicit Connection/Illegal Discharge Detection and Reporting	LS			
NS-8	Vehicle and Equipment Cleaning	LS			
NS-9	Vehicle and Equipment Fueling	LS			
NS-10	Vehicle and Equipment Maintenance	LS			
WM-1	Material Delivery and Storage	LS			
WM-3	Stockpile Management	LS			
WM-4	Spill Prevention and Control	LS			
WM-5	Solid Waste Management	LS			
WM-6	Hazardous Waste Management	LS			
WM-9	Sanitary/Septic Waste Management	LS			

TOTAL _____

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

Adjustments in the items of work and quantities listed in the approved cost break-down shall be made when required to address amendments to the WPCP, except when the adjusted items are paid for as extra work.

No adjustment in compensation will be made to the contract lump sum price paid for "Water Pollution Control" due to differences between the quantities shown in the approved cost break-down and the quantities required to complete the work as shown on the approved plans. No adjustment in compensation will be made for ordered changes to correct WPCP work resulting from the Contractor's own operations or from the Contractor's negligence.

The approved cost break-down will be used to determine partial payments during the progress of the work and as the basis for calculating the adjustment in compensation for the item of "Water Pollution Control" due to increases or decreases of quantities ordered by the Engineer. When an ordered change increases or decreases the quantities of an approved cost breakdown item, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the quantity of a contract item of work in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications. If an ordered change requires a new item which is not on the approved cost break-down, the adjustment in compensation will be determined in the same manner specified for extra work in conformance with Section 4-1.03D, "Extra Work," of the Standard Specifications.

If requested by the Contractor and approved by the Engineer, changes to the water pollution control practices listed in the approved cost break-down, including addition of new water pollution control practices, will be allowed. Changes shall be included in the approved amendment of the WPCP. If the requested changes result in a net cost increase to the lump sum price for "Water Pollution Control," an adjustment in compensation will be made without change to the water pollution control item. The net cost increase to the water pollution control item will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

WPCP IMPLEMENTATION

Unless otherwise specified, upon approval of the WPCP, the Contractor shall be responsible throughout the duration of the project for managing, installing, constructing, inspecting, maintaining, removing, and disposing of the water pollution control practices specified in the WPCP and in the amendments. Unless otherwise directed by the Engineer, the Contractor's responsibility for WPCP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. Requirements for management, installation, construction, inspection, maintenance, removal, and disposal of water pollution control practices shall conform to the requirements in the Manuals and these Special Provisions.

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

If the Contractor or the Engineer identifies a deficiency in the implementation of the approved WPCP, or amendments thereof, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the Engineer in writing, but shall be corrected prior to the onset of precipitation.

If the Contractor fails to correct the identified deficiency by the date agreed or prior to the onset of precipitation, the project shall be in nonconformance with this section. Attention is directed to Section 5-1.01, "Authority of Engineer," of the Standard Specifications, and to "Retention of Funds" of this section for possible nonconformance penalties.

If the Contractor fails to conform to the provisions of this section for "Water Pollution Control," the Engineer may order the suspension of construction operations until the project complies with the requirements of this section.

Implementation of water pollution control practices may vary by season. The Construction Site BMPs Manual and these Special Provisions shall be followed for control practice selection of year-round, rainy season and non-rainy season water pollution control practices.

Year-Round Implementation Requirements

The Contractor shall have a year-round program for implementing, inspecting and maintaining water pollution control practices for wind erosion control, tracking control, non-storm water management, waste management, and hazardous materials pollution control.

The National Weather Service weather forecast shall be monitored and used by the Contractor on a daily basis. An alternative weather forecast proposed by the Contractor may be used if approved by the Engineer. If precipitation is predicted, the necessary water pollution control practices shall be deployed prior to the onset of the precipitation.

Disturbed soil areas shall be considered active whenever the soil disturbing activities have occurred, continue to occur, or will occur during the ensuing 21 days. Non-active areas shall be protected as prescribed in the Construction Site BMPs Manual within 14 days of cessation of soil disturbing activities or prior to the onset of precipitation, whichever occurs first.

Rainy Season Implementation Requirements

Soil stabilization and sediment control practices conforming to the requirements of these Special Provisions shall be provided throughout the rainy season, defined as between October 15th and April 15th.

An implementation schedule of required soil stabilization and sediment control practices for disturbed soil areas shall be completed no later than 20 days prior to the beginning of each rainy season. The implementation schedule shall identify the soil stabilization and sediment control practices and the dates when the implementation will be 25 percent, 50 percent and 100 percent complete, respectively. For construction activities beginning during the rainy

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

season, the Contractor shall implement applicable soil stabilization and sediment control practices.

Non-Rainy Season Implementation Requirements

The non-rainy season shall be defined as days outside the defined rainy season. The Contractor's attention is directed to the Construction Site BMPs Manual for soil stabilization and sediment control implementation requirements on disturbed soil areas during the non-rainy season. Disturbed soil areas within the project shall be protected in conformance with the requirements in the Construction Site BMPs Manual with an effective combination of soil stabilization and sediment control.

MAINTENANCE

To ensure the proper implementation and functioning of water pollution control practices, the Contractor shall regularly inspect and maintain the construction site for the water pollution control practices identified in the WPCP. The construction site shall be inspected by the Contractor as follows:

- A. Prior to a forecast storm.
- B. After a precipitation event which causes site runoff.
- C. At 24 hour intervals during extended precipitation events.
- D. Routinely, a minimum of once every two weeks outside of the defined rainy season.
- E. Routinely, a minimum of once every week during the defined rainy season.

The Contractor shall use the Storm Water Quality Construction Site Inspection Checklist provided in the Preparation Manual or an alternative inspection checklist provided by the Engineer. One copy of each site inspection record shall be submitted to the Engineer within 24 hours of completing the inspection.

REPORTING REQUIREMENTS

Report of Discharges, Notices or Orders

If the Contractor identifies discharges into surface waters or drainage systems in a manner causing, or potentially causing, a condition of pollution, or if the project receives a written notice or order from a regulatory agency, the Contractor shall immediately inform the Engineer. The Contractor shall submit a written report to the Engineer within 7 days of the discharge event, notice or order. The report shall include the following information:

- A. The date, time, location, nature of the operation, and type of discharge, including the cause or nature of the notice or order.
- B. The water pollution control practices deployed before the discharge event, or prior to receiving the notice or order.

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

C. The date of deployment and type of water pollution control practices deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent reoccurrence.

D. An implementation and maintenance schedule for affected water pollution control practices.

Report of First-Time Non-Storm Water Discharge

The Contractor shall notify the Engineer at least 3 days in advance of first-time non-storm water discharge events. The Contractor shall notify the Engineer of the operations causing non-storm water discharges and shall obtain field approval for first-time non-storm water discharges. Non-storm water discharges shall be monitored at first-time occurrences and routinely thereafter.

PAYMENT

The contract lump sum price paid for “Water Pollution Control Program” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising, and amending the Water Pollution Control Program (WPCP.)

Attention is directed to Section 9-1.06, "Partial Payments," and Section 9-1.07, "Payment after Acceptance," of the Standard Specifications, and Section C6, “Payments” of these Special Provisions. Payments under the item for “Water Pollution Control Program” will also be paid as follows:

A. After the WPCP has been approved by the Engineer, 75 percent of the contract item price for “Water Pollution Control Program will be included in the monthly partial payment estimate.

B. After acceptance of the contract in conformance with the provisions in Section 7-1.17, "Acceptance of Contract," of the Standard Specifications, payment for the remaining 25 percent of the contract item price for “Water Pollution Control Program” will be made in conformance with the provisions in Section 9-1.07.

The contract lump sum price paid for “Water Pollution Control” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in implementing the Water Pollution Control Program (WPCP) and installing, constructing, maintaining, removing, and disposing of water pollution control practices, including non-storm water management, and waste management and hazardous materials pollution control practices, except those items for which there is a separate contract item of work as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer. Water pollution control practices for which there is a separate contract item of work will be measured and paid for as described in that contract item of work.

Bid Item Nos. 3 & 4) Water Pollution Control Program and Water Pollution Control:
(Continued)

Payments under “Water Pollution Control” for pollution control practices executed in accordance with the approved or amended “Water Pollution Control Cost Break-Down” of the WPCP above, or as otherwise approved by the Engineer, shall be paid as described in the Standard Specifications and these Special Provisions, including the specifications described herein above for determining adjustment in compensation, extra work, and/or retention of payments for pollution control practices performed under the lump sum price paid for the item “Water Pollution Control.” Attention is also directed to Section 9-1.06, "Partial Payments," and Section 9-1.07, "Payment After Acceptance," of the Standard Specifications, and Section C6, “Payments” of these Special Provisions.

Bid Item No. 5) Pavement Grinding:

Pavement grinding shall be done in accordance with Section 42-2, “Grinding” of the Standard Specifications and these Special Provisions.

In lieu of using the type of grinder specified in Section 42-2, the Contractor shall have the option of using any type of grinder that will produce the desired finish detailed in the aforementioned section, as long as it meets any required air quality and safety provisions.

Pavement grinding locations are at the pavement conforms located at: each end of the overlay limits at Afton Road and the concrete railroad crossing; each end of existing concrete culvert and bridge structures; over these structures where there is an existing overburden of seal coat or overlay treatments, as described in Subsection 1G, “Existing Highway Facilities,” herein; and other minor locations as may be determined in the field by the Engineer.

Pavement grinding performed at the project conform at Afton Road shall consist of grinding off the existing surface layer of asphalt concrete for the full pavement width for a distance 6 to 10 feet beyond the limits of the Type A asphalt concrete overlay, as well as grinding that portion of the roadway to be overlaid to a depth of 0.1 feet for the full width of the existing pavement and a distance of 50 feet. The exact limits shall be determined in the field as approved by the Engineer. For overlay conforms at the approaches to the existing concrete railroad crossing, bridge decks, or box culverts, the limits for pavement grinding shall be a distance of 100 feet from each approach for the full width of the existing pavement and a minimum depth of 0.1 feet, unless otherwise determined by the Engineer.

The grinding residual shall become the property of the Contractor and shall be disposed of off the road right-of-way. Disposal outside of the highway right-of-way shall be done in accordance with Section 7-1.13, “Disposal of Material Outside of the Highway Right of Way,” of the Standard Specifications, these Special Provisions, and as determined by the Engineer. However, upon approval of the Engineer, the Contractor may be allowed to spread the residual along the roadway shoulder at select locations adjacent to the project limits or include it in material used for roadway embankment construction. Pavement grinding residue used as shoulder backing material shall not be larger than 1½ inches in any dimension.

Bid Item No. 5) Pavement Grinding: (Continued)

The contract lump sum price paid for the item “Pavement Grinding,” as specified herein, shall include full compensation for furnishing all labor, materials, tools, equipment, hauling, and incidentals for doing all the work involved in grinding the existing pavement, as well as, removing and disposing of the residual or relocating and spreading the residual material, as approved by the Engineer.

Bid Item No. 6) Aggregate Base:

Aggregate base shall be Class 2, 3/4 inch maximum grading, and shall conform to the provisions in Section 26, “Aggregate Bases,” of the Standard Specifications and these Special Provisions.

The contract price paid per ton for the item “Aggregate Base” shall include full compensation for doing all the work involved in furnishing, hauling, grading, compacting and moisture conditioning all aggregate base areas referenced on the plans and as determined by the Engineer, such that no additional compensation will be allowed therefore.

Bid Item No. 7) Paving Asphalt Binder:

Paving asphalt binder for the placement of pavement reinforcing fabric shall conform to the provisions in Section 92, “Asphalts,” of the Standard Specifications and shall be Grade PG-64-10, unless otherwise ordered by the Engineer. The operation where this asphalt binder is to be used in conjunction with placement of the pavement reinforcing fabric shall not be applied to the existing pavement until the pavement temperature is at least **65 degrees Fahrenheit** and rising and shall conform to the provisions in Section 394.03, “Pavement Reinforcing Fabric,” of the Standard Specifications and these Special Provisions.

The contract price paid per ton for the item “Paving Asphalt Binder” shall include full compensation for doing all the work involved in furnishing, hauling, mixing, and placing all paving asphalt binder as required to install the pavement reinforcing fabric as indicated or referenced on the plans, the Standard Specifications, these Special Provisions, and as determined by the Engineer, such that no additional compensation will be allowed therefore.

Bid Item No. 8) Pavement Reinforcing Fabric:

Pavement reinforcing fabric shall conform to the provisions in Sections 39-2.03 and 39-4.03, “Pavement Reinforcing Fabric,” and Section 88, “Engineering Fabrics,” of the Standard Specifications and these Special Provisions.

The maximum width of pavement reinforcing fabric for payment shall be 24 feet wide.

Paving asphalt binder for placement of pavement reinforcing fabric shall be **Grade PG-64-10** conforming to the provisions in Section 92, “Asphalts,” of the Standard Specifications

Bid Item No. 8) Pavement Reinforcing Fabric: (Continued)

and these Special Provisions, unless otherwise ordered by the Engineer. Paving asphalt binder shall be paid for under a separate bid item as indicated herein above.

Installation of pavement reinforcing fabric shall cover the same limits as the overlay as shown on the plans and as directed by the engineer.

The contract price paid per square yard of reinforcing fabric shall include full compensation for doing all the work involved in furnishing, hauling, placing, all as specified and as determined by the Engineer, and no additional compensation will be allowed therefore.

Bid Item No. 9) Asphalt Concrete (Type A):

Asphalt concrete shall be Type A, ¾ inch maximum, medium grading and shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these Special Provisions.

All leveling courses shall be considered as included with and paid for by the item "Asphalt Concrete" and no additional compensation will be allowed therefore.

The grade of paving asphalt shall be **PGA 6a (modified)** or as determined by the Engineer and shall conform to the provisions of Section 92, "Asphalts," of the Standard Specifications.

If the Contractor selects the batch mixing method, asphalt concrete shall be produced by the automatic batch mixing method as provided in Section 39-3.03A(2), "Automatic Proportioning," of the Standard Specifications.

An asphalt paint binder shall be required on all existing pavements prior to placing asphalt concrete and shall conform to Section 39, "Asphalt Concrete," of the Standard Specifications. Paint binder shall be either paving asphalt grade PG 64-10 or Asphaltic Emulsion SS-1. The amount of asphalt binder to be mixed with the aggregate shall be determined by the Engineer and shall conform to the provisions of Sections 39-3.03, "Proportioning," and Section 92, "Asphalts," of the Standard Specifications.

Full compensation for furnishing and placing any asphalt paint binder required shall be included in the contract price paid per ton for the item "Asphalt Concrete (Type A)," and no additional compensation will be allowed therefore.

Longitudinal pavement joints shall be at lanelines established by the Engineer. Driveways and intersections are to be paved as determined by the Engineer. Driveway and intersection paving shall not be done until placement of the adjacent mainline paving has been completed. The Contractor shall re-establish the construction centerline after the initial placement of pavement reinforcing fabric and prior to placement of the asphalt concrete mat.

Bid Item No. 9) Asphalt Concrete (Type A): (Continued)

Turn pockets, asphalt median crossovers, intersections, driveway conforms, tapers, and leveling courses are to be paved as determined by the Engineer. Unless otherwise permitted by the Engineer, mainline paving shall be completed prior to placement of any of this other paving. Asphalt concrete used in the construction of these areas shall be Type A, ¾" maximum, medium grading, unless otherwise specified by the Engineer. Payment for furnishing and placing the asphalt concrete used in these areas shall be paid for at the contract price per ton for the item "Asphalt Concrete," and no additional compensation will be allowed therefore.

In addition to the requirements in Section 39-5.01, "Spreading Equipment," of the Standard Specifications, asphalt paving equipment shall be equipped with automatic screed controls and sensing devices.

When placing the initial mat of asphalt concrete, the end of the screed nearest the centerline, shall be controlled by a sensor activated by a ski device not less than twenty nine feet in length. The opposite end of the screed shall be controlled by an automatic transverse slope device set to produce the cross slope to match the existing slope, or as otherwise determined by the Engineer.

When paving contiguously with a previously placed mat, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to the grade of the previously placed mat and will reproduce the grade in the new mat within a 0.02 of a foot tolerance. The opposite end of the screed shall be controlled in the same manner mentioned in the paragraph above.

All paving operations shall be discontinued should the methods and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the requirements in Section 39-6.03, "Compacting," of the Standard Specifications, these Special Provisions, and as determined by the Engineer. Upon approval by the Engineer, the Contractor may resume paving operations following modifications to the existing equipment, procedures or furnish substitute equipment.

Should the automatic screed controls fail to operate properly during any day's work, the Contractor may use manual control of spreading equipment for the remainder of the day, however, the equipment shall be repaired or replaced with equipment conforming to the requirements in this section before starting another day's work.

The Contractor shall schedule his paving operations such that each layer of asphalt concrete is placed on contiguous lanes along the traveled way. At the end of each work shift, the distance between the ends of the layers of asphalt concrete on adjacent lanes shall not be greater than 10 feet nor less than 5 feet. Additional paving shall be placed along the

transverse edge at the end of each lane and along the exposed longitudinal edges between adjacent lanes, hand raked and compacted to form temporary conforms. Kraft paper or other

Bid Item No. 9) Asphalt Concrete (Type A): (Continued)

approved bond breaker shall be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.

Full compensation for furnishing and placing the Kraft paper or other bond breaking material on the pavement joints shall be included in the contract prices paid for the various items of work and no other compensation will be allowed therefore.

During and after the rolling operations and when ordered by the Engineer, the asphalt concrete may be cooled by applying water. Applying water shall conform to the provisions in Section 17, "Watering," of the Standard Specifications. No layer shall be cooled with water unless ordered or permitted by the Engineer.

Full compensation for furnishing and applying water during rolling operations will be considered as included in the contract price paid per ton for "Asphalt Concrete," and no additional compensation will be allowed therefore.

Asphalt concrete shall be compacted to a relative compaction of not less than 95 percent and shall be finished to the lines and cross sections as shown on the plans and as determined by the Engineer.

Asphalt concrete pavement shall conform to the straightedge requirements in Section 39-6.03, "Compacting," of the Standard Specifications and these Special Provisions.

Areas of the top surface of the uppermost layer of asphalt concrete that do not meet the specified surface tolerances shall be brought within tolerance by abrasive grinding followed with the application of a fog seal coat on the ground areas.

Deviations in excess of 0.03 of a foot which, cannot be brought to the specified tolerances by abrasive grinding shall be corrected by either (1) removal and replacement; or (2) placement of an asphalt concrete overlay. The Contractor shall select the corrective method for each area with approval by the Engineer prior to the beginning of corrective work.

Any replacement and/or overlay pavement not meeting the specified tolerances shall be corrected by the aforementioned methods as approved by the Engineer.

The abrasive grinding used to bring the finished surface of the asphalt concrete within specified surface tolerances may be expanded in each direction so that the lateral limits of the grinding are at a constant offset from and parallel to the nearest lane line or pavement edge, while the longitudinal grinding limits are normal to the pavement centerline. All ground areas shall be uniform in appearance and rectangular in shape.

Abrasive grinding shall conform to the requirements in the first paragraph and the last four paragraphs in Section 42-2.02, "Construction," of the Standard Specifications.

Bid Item No. 9) Asphalt Concrete (Type A): (Continued)

Full compensation for doing all the work in performing profile checks, supplying all required tools, equipment and materials, performing all corrective work to the pavement surface including abrasive grinding, furnishing and placing asphalt concrete for use in removal and replacement as well as the asphalt concrete overlay methods of correction shall be borne by the Contractor and no additional payment will be made therefore.

Full compensation for preparing, mixing, hauling, placing, and compacting the asphalt concrete (Type A) shall be paid for by the ton and considered as included in the item "Asphalt Concrete (Type A)," and no additional compensation will be allowed therefore.

Bid Item No. 10) Asphaltic Emulsion (Fog seal Coat):

Asphaltic emulsion (fog seal coat) shall be the asphaltic emulsion designation SS-1H and shall conform to Sections 37-1, "Seal Coats," and 39, "Asphalt Concrete," of the Standard Specifications and these Special Provisions.

No adjustment in compensation will be made for any increase or decrease in the quantity of fog seal required, regardless of the reason for such increase or decrease. The provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications shall not apply to the item of "Asphaltic Emulsion (Fog Seal Coat)," which may be eliminated in its entirety.

Bid Item Nos. 11 &12) Thermoplastic Traffic Stripes and Pavement Markings:

Thermoplastic traffic stripes (traffic lines) 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.

Thermoplastic material for traffic stripes shall be applied at a minimum thickness of 0.080 inch.

Measurement for payment for replacement of existing Detail 38 striping shall be paid for as (2) – 4" stripes.

Thermoplastic lettering stencils shall have the same dimensions as the "Hawkins Traffic Safety Supply" M8H Series. A copy of the stencil dimensions is available for review at the office of the Director of Public Works. Traffic arrows shall be of the dimensions pursuant to those shown in the State of California, Department of Transportation's Standard Plans.

Measurement for payment for the contract price paid per square foot of “Thermoplastic Pavement Markings” shall be the square footage for the completed markings as shown in the aforementioned Standard Plans.

Bid Item Nos. 11 &12) Thermoplastic Traffic Stripes and Pavement Markings:
(Continued)

The State Specification Number for glass beads in Section 84-2, "Materials," of the Standard Specifications is amended to read "8010-21C-22 (Type II)".

The unit prices paid for lineal foot of 4-inch Thermoplastic Stripe and square foot of Thermoplastic Pavement Markings shall include full compensation for furnishing all labor, tools, materials, and equipment, and for doing all the work involved in installing the thermoplastic and no additional compensation will be allowed therefore.

Bid Item No. 13) Pavement Markers (Retroreflective):

Retroreflective pavement markers shall conform to the provisions in Section 85, "Pavement Markers," of the Standard Specifications and these Special Provisions. However, the second paragraph in Section 85-1.02, "Type of Markers," of the Standard Specifications shall not apply. Certificates of compliance shall be furnished for pavement markers as specified in "Pre-qualified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

Pavement markers shall be “3M Series 290” or better. Adhesive shall be “Crafco Hot-Applied Flexible Pavement Marker Adhesive” (Part No. 34270) or better.

During pavement marker placement, traffic control during placement operations shall conform to the requirements of "Traffic Control System For Lane Closure," of these Special Provisions.

The unit price paid for each retroreflective pavement marker shall include full compensation for furnishing all labor, tools, materials, and equipment, and for doing all the work involved in installing the pavement marker and no additional compensation will be allowed therefore.

Bid Item No. 14) Pavement Markers (Non-Reflective):

Non-reflective pavement markers shall conform to the provisions in Section 85, "Pavement Markers," of the Standard Specifications and these Special Provisions. However, the second paragraph in Section 85-1.02, "Type of Markers," of the Standard Specifications shall not apply. Certificates of compliance shall be furnished for pavement markers as specified in "Pre-qualified and Tested Signing and Delineation Materials" elsewhere in these Special Provisions.

White Type "A" non-reflective pavement markers shall be installed as indicated on Plan Sheet P-2 included in these Special Provisions and as located in the field by the Engineer.

Adhesive shall be "Crafco Hot-Applied Flexible Pavement Marker Adhesive" (Part No. 34270) or better.

Bid Item No. 14) Pavement Markers (Non-Reflective): (Continued)

During pavement marker placement, traffic control during placement operations shall conform to the requirements of "Traffic Control System For Lane Closure," of these Special Provisions.

The unit price paid for each non-reflective pavement marker shall include full compensation for furnishing all labor, tools, materials, and equipment, and for doing all the work involved in installing the pavement marker and no additional compensation will be allowed therefore.

C. FINISHING ROADWAY

Finishing roadway shall conform to the provisions in Section 22, "Finishing Roadway," of the Standard Specifications and these Special Provisions.

Full compensation for finishing roadway shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.