

MADERA UNIFIED SCHOOL DISTRICT  
CONSTRUCTION OF  
PARKING LOT RECONSTRUCTION  
AT  
MADERA UNIFIED SCHOOL DISTRICT OFFICE  
SPECIAL PROVISIONS

**B. SPECIAL PROVISIONS**

**INTRODUCTION**

The work covered by this Project shall be done in accordance with these Special Provisions and with the applicable provisions of the Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation (Caltrans), latest edition, hereinafter referred to as the Standard Specifications, the City of Madera and County of Madera Standard Plans and Specifications, and Title 21 and Title 24 of the California Code of Regulations (CCR). These Technical Specifications provide additional information, to be used in conjunction with the Standard Specifications, intended to modify or supplement requirements of the Standard Specifications to suit the specific needs of the project.

If a particular section of the Standard Specifications dealing with construction required for this project does not have a like numbered counterpart section in these Special Provisions, such circumstance shall not be construed as an indication that the requirements of that particular section are invalid. Rather, it indicates that the applicable requirements of the Standard Specifications stand as written and shall govern the work. When a like numbered counterpart section is included in these Special Provisions, the requirements of the Standard Specifications shall be considered valid as modified, supplemented, or superseded by the requirements of these Special Provisions. The Standard Specifications and Special Provisions may be collectively referred to hereinafter as "the Specifications".

**SECTION 1 - DEFINITIONS AND TERMS**

Reference is made to the General Conditions.

**SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS**

2-1.03 Examination of Plans, Specifications, Contract, and Site of Work. - The Contractor is required to examine carefully the site of the proposed work, the bid proposal, plans, specifications and Contract Documents for the work contemplated, and it will be assumed that the Contractor (bidder) has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of the work to be performed and materials to be furnished, and as to the requirements of the specifications, the requirements of the Madera Unified School District, and the Contract. The submission of a proposal for this work shall be considered prima facie evidence that the Contractor (bidder) has made such examination and is satisfied with the conditions and scope the work.

**SECTION 4 - SCOPE OF WORK**

4-1.01 Intent of Plans and Specifications. - The Contractor's attention is directed to the provisions of Subsection 4-1.01 of the Standard Specifications. The work to be done consists, in general, of removal of asphalt concrete pavement, concrete curb and sidewalk, signs and wheelstops; installation of asphalt concrete pavement, concrete curb and sidewalk, wheelstops, pavement striping and marking, signs, and all other related items of work as shown on the construction plans and the specifications for the Parking Lot Reconstruction at Madera Unified School District Office.

All work shall be completed as shown on the plans entitled "Construction of Parking Lot Reconstruction at Madera Unified School District Office", and as indicated in these Technical Specifications.

#### SECTION 5 - CONTROL OF WORK

5-1.04 Coordination and Interpretation of Plans, Standard Specifications, and Special Provisions. - The Contractor's attention is directed to the provisions of Subsection 5-1.04 of the Standard Specifications. The work covered by this Project shall be done in accordance with these Special Provisions and with the applicable provisions of the Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation (Caltrans), latest edition, hereinafter referred to as the Standard Specifications, the City of Madera, and County of Madera Standard Plans and Specifications, and Title 21 and Title 24 of the California Code of Regulations (CCR).

5-1.07 Lines and Grades. - No construction staking will be provided to the Contractor. The Contractor shall retain, at his own expense, the services of State of California Licensed Land Surveyor or Civil Engineer to provide construction staking for all work involved in the project.

#### SECTION 6 - CONTROL OF MATERIALS

6-3.01 General. - Compaction testing will be done by a firm secured by the Owner for all items of work for which compaction requirements are specified. The Contractor shall give notice to the Engineer a minimum of two working days in advance of the time compaction testing will be required. Compaction tests will be done at locations selected by the Engineer, and the initial tests will be performed at no cost to the Contractor. Further testing in areas requiring recompaction after having failed initial tests will be done at the Contractor's expense, and the cost thereof will be deducted from monies owed the Contractor under progress or final payments. Compaction testing will be done as prescribed in ASTM D-1557 for relative compaction determinations.

6-3.02 Submittals. - The Contractor shall submit copies, checked and approved by him, of all shop drawings, materials and schedules required for the work of the various trades. Submittals shall be delivered promptly so delays in delivery of materials or execution of the work will be avoided. The Engineer will make desired corrections with reasonable promptness, and return the submittal to the Contractor. The Contractor shall make any corrections required by the Engineer and submit the required corrected copies for final review and distribution.

The Engineer's review of submittal drawings or schedules shall not relieve the Contractor of responsibility for deviations from the project drawings or specifications, unless he has, in writing, called the Engineer's attention to such deviations at the time of original submission, and secured written approval from the Engineer. The Engineer's review shall be as complete and thorough as possible, but shall not be construed as an "approval" or to relieve the Contractor(s) and material suppliers of responsibility for errors or omissions in the submitted documents.

Promptly after award of the Contract, the Contractor shall prepare and submit to the Engineer a Construction Schedule for the work. The schedule shall be reviewed and revised as necessary for approval by the Engineer and Owner. The Construction Schedule shall show the complete sequence of construction by task. The schedule shall show the dependencies between tasks, each tasks duration and show dates for the beginning and end of each task.

#### Required Submittal Quantities:

- A. Brochures, product information and/or manufacturer's catalog sheets shall be submitted in sequential sets for each material within each category or work: 6 (six) sets shall be submitted.
- B. Shop Drawings, and original details produced for specific portions of the work: One reproducible (sepia) print and bond reproducible print for each sheet or detail.
- C. Samples of finish materials: Minimum of 2 samples.

- D. Manufactured devices or equipment items: One sample returned to supplier and which, when approved, may be incorporated into the work.
- E. Operating Manuals shall be submitted for all equipment items when required in the various specifications sections. A minimum of 3 copies unless otherwise noted.

## SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITY

7-1.04 Permits and Licenses. – The Contractor is responsible to pay all fees and to obtain said permits. The Contractor shall procure same in accordance with the provisions of Subsection 7-1.04 of the Standard Specifications. An encroachment permit from the City of Madera, or County of Madera, will be required for offsite work.

7-1.08 Public Convenience. - Some or all of this work may, of necessity, be required to be done while onsite facilities are being used for other authorized purposes. The Contractor is advised that the construction of this project may be during school hours and therefore, there may be students, faculty, visitors, and District personnel in the vicinity of the work. The Contractor's attention is directed to the applicable provisions of Subsection 7-1.08 of the Standard Specifications.

7-1.09 Public Safety. - The Contractor shall provide safe pedestrian access through or around the work site at all times for the duration of the project. The Contractor shall provide temporary 6' high chain link fencing around the work areas to ensure that students, staff and pedestrians do not get into the work areas. The Contractor's attention is directed to the applicable provisions of Subsection 7-1.09 of the Standard Specifications. Temporary fencing shall be installed between the campus and office area and the work area.

7-1.11 Preservation of Property. - Prior to excavating the Contractor shall contact school officials to identify any known utility location. The Contractor shall exercise extreme caution in excavating and compacting for this project in the area of suspected existing utilities and shall protect existing utilities from damage, in as much as their exact location or the exact number of utilities is uncertain.

Attention is also directed to Sections 7-1.12 and 8-1.10 of the Standard Specifications.

7-1.14 Cooperation. - The Contractor shall cooperate with all Madera Unified School District personnel during their pursuit of normal work activities at the site, whether or not related to this work. There may be other contractors at the site conducting construction or maintenance operations under separate contracts to the District. The Contractor shall cooperate with such other contractors to ensure that his activities do not delay or hinder their operations or the related activities of District Personnel. The District reserves the right to direct the order of the Contractor's work at the site as may be necessary to coordinate this work with other onsite operations and activities. The Contractor shall coordinate his efforts with the District to ensure that campus irrigation practices and scheduling does not result in the saturation of soils in the work area.

Full compensation for all costs involved in meeting and satisfying the details and requirements specified in this Section shall be included, as part of the contract lump sum bid for the entire project, and no additional payment will be made therefore.

## SECTION 8 - PROSECUTION AND PROGRESS

8-1.03 Beginning of Work. - The Contractor shall begin onsite construction operations within ten (10) calendar days of the commencement date specified by the District in the Notice to Proceed.

8-1.04 Progress Schedule. - The Contractor shall diligently prosecute this work to completion no later than sixty (60) calendar days total after the commencement date specified by the District in the

Notice to Proceed. All construction must be completed within the first thirty (30) calendar days of the sixty (60) calendar days allotted to the project. The remaining thirty (30) calendar days are allotted for the pavement curing period, seal coating, and pavement striping.

At least seven (7) calendar days prior to the commencement date, the Contractor shall submit a proposed progress schedule. The schedule shall indicate the dates proposed for beginning and completion of each part of the work. The schedule will be reviewed by the Engineer for practicability with respect to overall completion time and with respect to potential effects of the work on campus access and parking during construction. No onsite construction operations shall begin prior to the date of the Engineer's approval of the Contractor's proposed progress schedule.

8-1.10 Utility and Non-Highway Facilities. - The Contractor's attention is directed to the provisions of Subsections 7-1.11, 7-1.12, and 8-1.10 of the Standard Specifications. The Contractor shall notify Underground Service Alert (USA), by calling 811, and the District at least 48 hours prior to the scheduled commencement of construction operations to request identification and marking of known utilities in the area of the work. Prior to excavating, the Contractor shall contact school officials to identify any known utility locations. The Contractor shall exercise extreme caution in excavating and compacting for this project in the area of suspected existing utilities and shall protect existing utilities from damage, inasmuch as their exact location or the exact number of utilities is uncertain. The Contractor shall exercise extreme caution in excavation and compaction operations in the area of existing utilities and shall protect them from damage. Marking and identification of utilities shall in no way relieve the Contractor of his responsibility to protect and preserve existing utilities and his responsibility to repair or replace those damaged as a result of his operations. No separate measurement or payment will be made for the protection and preservation of existing utilities, or for the repair or replacement of existing utilities damaged by the Contractor, the cost thereof being considered as included in the contract lump sum price for the entire project.

## SECTION 9 - PAYMENT

### 9.1.04 CHANGE ORDERS

9.1.04.1 The Owner, without invalidating the Contract, may order changes in the work within the general scope of the Contract consisting of additions, deletions, or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the work shall be authorized by change order, and shall be executed under the applicable conditions of the Contract Documents.

9.1.04.2 A Change Order is a written order to the Contractor signed by the Owner and the Engineer, issued after the execution of the Contract, authorizing change in the work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order.

9.1.04.3 The cost or credit to the Owner resulting from a change in the work shall be determined in one or more of the following ways:

- A. By mutual acceptance of a lump sum properly itemized;
- B. By unit prices stated in the Contract Documents or subsequently agreed upon; or
- C. By cost and a mutually acceptable fixed or percentage fee.

9.1.04.4 Allowable compensation for all overhead and profit related to the execution of Change Order Work:

- A. Subcontractors
  - 1. Change Order Work less than \$2,500 not including markup.
    - a.) 10% for overhead.
    - b.) 10% for profit.

2. Change Order Work that exceeds \$2,500 not including markup.
  - a.) 10% for overhead.
  - b.) 5% for profit.
- B. Contractor
  1. Change Order Work less than \$2,500 not including markup.
    - a.) 10% for overhead excluding bond premium for work performed by subcontractor or by Contractor's employees.
    - b.) 5% for profit for work performed by subcontractor and 5% for profit for work performed by Contractor's employees.
  2. Change Order Work exceeds \$2,500 not including markup.
    - a.) 5% for overhead for work performed by subcontractor and 10% for overhead for work performed by Contractor's employees, excluding bond premium.
    - b.) 5% for profit for work performed by subcontractor and 5% for profit for work performed by Contractor's employees.

9.1.04.5 If none of the methods set forth in Subparagraph 9.1.04.3 is agreed upon, the Contractor, provided he receives a Change Order, shall promptly proceed with the work involved. The cost of such work shall then be determined by the Engineer on the basis of the Contractor's reasonable expenditures and savings, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clause 9.1.04.3 C above, the Contractor shall keep and present, in such form as the Engineer may prescribe, an itemized accounting together with appropriate supporting data. Pending final determination of cost to the Owner, payments on account shall be made on the Engineer's Certificate for Payment. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change, which results in a net decrease in cost will be, the amount of the actual net decrease as confirmed by the Engineer. When both additions and credits are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net increase, if any.

9.1.04.6 If unit prices are stated in Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities or work proposed will create a hardship on the Owner or the Contractor, the applicable unit prices shall be equitably adjusted to prevent such hardship.

9.1.04.7 Should concealed conditions encountered in the performance of the work below the surface of the ground be a variance with the conditions indicated by the Contract Documents or, should unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either party made within a reasonable time after the first observance of the conditions.

9.1.04.8 If the Contractor claims that additional cost or time is involved because of (1) any written interpretation, (2) any order by the Engineer to stop the Work where the Contractor was not at fault, or (3) any written order for a minor change in the work issued, the Contractor shall make such claim for additional work.

## SECTION 16 - CLEARING AND GRUBBING

16-1.01 Description. - Clearing and Grubbing shall conform to the requirements of Section 16 of the Standard Specifications as modified and supplemented by these Special Provisions and the Plans.

Demolition, where required, shall consist of the clearing of the site, sawcutting, removal of pavement structural section, concrete curb and sidewalk, precast concrete wheelstops, post sleeves, signs and other items designated for removal on the plans.

Concrete and pavement removal shall conform to the provisions of Section 15 of the Standard Specifications.

16-1.03 Construction. - Where a portion of existing concrete improvements is to be removed, it shall be sawcut to a minimum depth of 1½ inches with an abrasive type saw at the removal limits shown on the plans and removed without damage to any portion that is to remain in place. If the concrete cannot be cut off square and neat, it shall be removed to the nearest weakened plane or expansion joint and replaced in kind.

Asphalt concrete designated for removal shall be sawcut at the removal limits to a minimum depth of 1½ inches with an abrasive type saw. The limits of all items to be removed shall be verified and approved by the Inspector prior to demolition and removal.

In existing turf areas where new paving or concrete facilities are proposed, the existing turf shall be removed to a minimum depth of 6" prior to placing any fill or grading.

16-1.04 Removal and Disposal of Materials. - All materials removed by the Contractor in the course of this work and not designated to be salvaged or relocated onsite shall be legally disposed of by the Contractor at an off-site location secured by the Contractor. Payment of all fees related to disposal is to be paid by the contractor and the fee shall be included in the lump sum price bid for the work of this contract.

16-1.06 Payment. - Payment for clearing and grubbing will be made as part of the contract lump sum. The price shall be full compensation for doing all work, including all labor, material, tools, equipment and incidentals involved in clearing and grubbing.

#### SECTION 17 - CONSTRUCTION WATER

17-1.01 Description. - The District will not provide construction water for this project; the Contractor shall develop and pay for a water supply and furnish all water required for the work.

17-1.04 Payment. - No separate payment will be made for construction water, the cost thereof being considered as included in the cost of those items for which it is required. The Contractor shall be responsible for the payment of any and all temporary meter and water use charges imposed by the authority or company from which construction water is obtained.

#### SECTION 19 - EARTHWORK

19-1.01 Description. - Earthwork shall conform to the requirements of Section 19 of the Standard Specifications as modified and supplemented by these Special Provisions and the Plans.

Earthwork compaction shall conform to the requirements of Subsection 19-5 of the Standard Specifications. The relative compaction of all subgrade material, such as that on which aggregate base, asphalt concrete, or Portland cement concrete is to be placed, shall be at least 95% for a minimum depth of six inches below subgrade surface. All compaction in turf and planter areas shall be 85% relative compaction. All relative compaction determinations for the work will be performed in accordance with ASTM Test Method D1557.

Prior to placing any fill material in existing turf areas where new turf is to be established all existing turf shall be scarified. Where new concrete or pavement improvements are to be constructed all existing turf is to be removed to a minimum depth of 4".

Any imported soil to be placed in areas that will receive asphalt or concrete surfacing shall have an "R" value of not less than 50.

The Contractor shall provide smooth transition grading between the limits of grading and new improvements. Included in the grading work are all labor, materials, and equipment to adjust all existing and proposed utility boxes in the area of grading to the new finished grades.

19-1.03      Grade Tolerance. - Subgrade shall be accurately graded and compacted to proper profile and section, at elevations determined by subtracting the specified thickness of proposed improvements from finished grade elevations. Subgrade elevation shall not vary more than 0.05 foot above or below the design subgrade surface so defined.

19-2.02      Unsuitable Material. - Prior to the construction of proposed improvements, the Engineer may require that the Contractor provide and operate a test roller of size and weight meeting the Engineer's approval to identify any soft or spongy areas in the finished subgrade. Subgrade material in such areas shall be removed and replaced to the satisfaction of the Engineer. No additional payment will be made for test rolling or the correction of subgrade deficiencies identified thereby.

19-2.08      Measurement. - No measurement of earthwork operations will be made.

19-2.09      Payment. - Payment for earthwork will be made as part of the contract lump sum amount. The price shall be full compensation for doing all work, including furnishing all labor, material, tools, equipment and incidentals involved in the earthwork.

19-3.01      Earthwork Section. - The exposed subgrade should be excavated/scarified to a depth of at least 12 inches, worked until uniform and free from large clods, moisture conditioned as necessary and recompacted to a minimum of 95 percent of maximum density based on ASTM Test Method D1557. Limits of recompaction should extend 5 feet beyond structural elements. Following the grading of the subgrade, the pavement sections should be placed and compacted to a minimum of 95 percent of maximum density based on ASTM Test Method D1557.

Excavations, depressions, or soft and pliant areas extending below planned finished subgrade levels should be cleaned to firm, undisturbed soil and backfilled with Engineered Fill. Any buried structures encountered during construction should be properly removed and backfilled. In general, any septic tanks, debris pits, cesspools, or similar structures should be entirely removed. Concrete footings should be removed to an equivalent depth of at least 3 feet below proposed footing elevations or as recommended by the Geotechnical Engineer. Any other buried structures should be removed in accordance with the recommendations of the Geotechnical Engineer. Resulting excavations should be properly backfilled. The geotechnical engineer should be present during all site clearing and grading operations to test and observe earthwork construction. The Geotechnical Engineer may reject any material that does not meet compaction and stability requirements.

The on-site soils that are sandy soils will be suitable for reuse as engineered fill, provided they are cleansed of excessive organics and debris. The re-cycled asphalt concrete or aggregate base will be suitable for reuse as engineered fill, provided they are cleansed of excessive organics and debris. The asphalt concrete / aggregate base will be suitable for re-use as recycled aggregate base, provided they meet the aggregate base criteria. The preferred materials specified for engineered fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since he has complete control of the project site. Imported non-expansive non-corrosive fill should consist of a well-graded, slightly cohesive silty fine sand or sandy silt, with relatively impervious characteristics when compacted. This material should be approved by the Engineer prior to use and should typically possess the following characteristics:

- Maximum Percent Passing No. 200 Sieve 50
- Maximum Particle Size 3"
- Maximum Plasticity Index 10
- Maximum UBC Standard 29-2 Expansion Index 15

Fill soils should be placed in lifts approximately 6 inches thick, moisture-conditioned as necessary and compacted to achieve at least 95 percent of the maximum dry density as determined by ASTM D1557. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

## SECTION 20 – LANDSCAPE

See Section 32 84 00 and 32 90 00 in the Appendix for Irrigation and Landscape Planting Specifications.

## SECTION 26 - AGGREGATE BASE

26-1.02      Materials. - Aggregate base shall be a Class 2 aggregate base.

26-1.04      Spreading. - Placing of imported aggregate shall conform to the requirements of Sections 26-1.04 of the Standard Specifications except that use of a motor grader will be permitted. The surface of the finished aggregate base at any point shall not vary more than 0.03 feet above or below the specified grade at that point. No more than 50 percent of the finished surface shall be above or below the specified grade for aggregate base.

26-1.05      Compacting. - The relative compaction of compacted aggregate base material shall not be less than 95 percent as determined by ASTM D-1557.

26-1.06      Measurement. - No measurement of aggregate base will be made.

26-1.07      Payment. - Payment for aggregate base will be made as part of the contract lump sum amount. The price shall be full compensation for aggregate base, complete and in place, including all labor, materials, tools and equipment required for spreading, compacting and all other items incidental to the work.

## SECTION 29 – SOIL STERILIZATION

29-1.01      Description - This work shall consist of furnishing and placing pre-emergence herbicide under all new asphaltic concrete pavement.

29-1.02      Standards - In accordance with the following:

|         |   |
|---------|---|
| CCR-T21 | California Code of Regulations, Title 21 Public Works                               |
| CBC     | California Building Code, California Code of Regulations, Title 24, Part 2, CCR-T24 |
| USDA    | United States Department of Agriculture   |
| EPA     | Environmental Protection Agency   |
| HSA     | The Healthy Schools Act of 2000 (California AB 2260)                                |

All applicable environmental Regulations and Standards.

29-1.03      Quality Assurance - An individual licensed in the State of California shall apply the pre-emergence herbicide. The product shall comply with the current EPA laws at the time of application. The Contractor shall submit the written recommendations from the licensed applicator to the Engineer prior to the application of the herbicide.

29-1.04      Submittal - Submit six (6) copies of the following to the Engineer for his file and distribution:

1. Product Information.
2. Certificates of Application.
3. Certificate of Compliance for Material.

29-1.05      Product - The herbicide shall be currently registered by the State Department of Agriculture and the EPA and allowed for the intended use.

29-1.06      Execution - The herbicide shall be applied in accordance with the producer's recommendation, The Healthy Schools Act of 2000 (HSA), and all applicable environmental regulations and standards. Apply the herbicide solution over the surface to be paved prior to the placement of asphalt concrete or other surfacing. The herbicide shall be in spray form and applied at a rate allowable



by the State of California and as determined by the licensed applicator. Take all precautions to limit herbicide solution to areas immediately under the proposed pavement. Use shields as necessary and do not apply under windy conditions.

29-1.07 Payment - Payment for soil sterilization will be made as part of the contract lump sum amount for the entire project. The price shall be full compensation for soil sterilization, complete in place, including all labor, material, and tools required for the application for the herbicide and all other item incidental to the work.

## SECTION 39 - ASPHALT CONCRETE

39-1.01 Description. - Asphalt concrete shall be Type B asphalt concrete produced with aggregate conforming to the grading requirements for  $\frac{3}{4}$ " maximum medium aggregate for base courses and  $\frac{1}{2}$ " maximum medium aggregate for the final course of paving. If pavement is to be placed in a single lift, the aggregate shall be  $\frac{3}{4}$ " maximum medium. Contractor shall submit to the Engineer for his approval prior to ordering and asphalt concrete, the proposed gradation of the asphalt concrete mix he proposes to use. No "fine" mixes will be allowed.

39-2.01 Asphalts. - Asphalt binder to be mixed with aggregate shall be steam-refined paving asphalt conforming to the requirements of Section 92 for performance grade (PG 64-10). Asphaltic emulsion for paint binder shall conform to the requirements of Section 94 for Grade SS1, unless otherwise directed or approved by the Engineer.

39-3.03 Proportioning - Before producing asphalt concrete, the Contractor shall submit in writing to the Engineer the gradation of the aggregate and the bitumen ratio for the mix the Contractor proposes to furnish. No asphaltic concrete shall be produced prior to issuance of the Engineer's written approval of the Contractor's proposed aggregate gradation and bitumen ratio. The bitumen ratio shall be no less than 3 and no more than 7 pounds of asphalt per 100 pounds of dry aggregate.

39-4.02 Prime Coat and Paint Binder - Where asphalt concrete is placed adjacent to or atop Portland Cement Concrete or asphalt concrete surfaces, except where it is placed atop pavement reinforcing fabric, all surfaces against which asphalt concrete is to be placed shall be coated with a paint binder applied at the rate of no less than 0.02 and no more than 0.10 gallons per square yard. All vertical concrete surfaces, which will be in contact with asphalt concrete surfacing and all areas now in place, which will be covered with new surfacing materials and feathering operations, shall be coated with a paint binder applied at the rate of 0.05 gallons per square yard.

39-6.01 General Requirements. - The haul vehicles used to transport asphalt concrete from the plant to the job site shall have a  $\frac{3}{8}$ -inch diameter hole located on the driver's side in such a position that the plant inspector or Engineer can safely and conveniently insert a thermometer into the asphalt concrete to determine the temperature of the mix from alongside the vehicle. This hole shall be so located that the outside temperature will have a minimum effect on the reading.

The Contractor shall furnish certified load slips to the Engineer as soon as the haul vehicles have been unloaded on the job site.

A soil sterilant approved by the Engineer shall be applied over the entire surface area of the compacted aggregate base rock prior to the placement of asphalt concrete. Soil sterilant shall be applied by an individual licensed for the application of the sterilant. Soil sterilant shall also be applied to all cracks, after cleaning and prior to application of crack filler.

The Contractor shall taper or feather asphalt concrete to conform to existing surfacing or concrete improvements as directed by the Engineer. No surfacing will be allowed when the air temperature is below 50 degrees F.

Asphaltic concrete shall be laid to the thickness designated on the Plans. The plan thickness is to be considered as a minimum thickness. The Contractor shall lay the asphaltic concrete to a depth required to insure that, after compaction, the in-place compacted thickness is equal to or greater than the specified

plan thickness.

The Contractor shall provide to the Engineer the truck delivery weight tags for the asphaltic concrete material. The quantity delivered shall be equal to or greater than the calculated in-place quantity based on the specified thickness and area to be paved, as designated on the construction plans and based on a unit density of the asphaltic concrete of 144 pounds per cubic feet.

39-6.03      Compacting. - Compaction operations shall be commenced as soon after spreading, as the mixture will support compaction equipment without excessive displacement or deformation.

39-8.02      Payment. - Payment for asphalt concrete will be made as part of the contract lump sum amount. The price shall be full compensation for asphalt concrete paving, complete in place, including all labor, materials, and tools required for prime coat, paint binder, patching, concrete, spreading, compaction, placement of asphalt based seal coat and all other items incidental to the work.

## SECTION 56 - SIGNS

56-2.01      Description. - Disabled parking signs shall be as shown on the plan and detail drawings, each parking space for the physically disabled shall be identified by a permanently affixed reflectorized sign. All other signs shall be installed as shown on the plan and detail drawings and shall meet the requirements of Caltrans, City of Madera, County of Madera, and Madera Unified School District Standards.

56-2.06      Payment. - Payment will be made as part of the contract lump sum amount. The price bid shall be full compensation for the work, complete and in place, including all labor, materials, and tools required for furnishing and installation of the sign and all other items incidental to the work.

## SECTION 73 - CONCRETE IMPROVEMENTS

73-1.01      Description. - This work shall consist of constructing Portland Cement Concrete curb, gutter, and sidewalk of the form and dimensions shown on the plans and in accordance with the requirements of the Standard Specifications as modified and supplemented by these Special Provisions.

### A.      General

All concrete improvements shall be installed in accordance with the details shown on the plans and City of Madera, and County of Madera Standard Drawings for all off-site work. All work shall comply with the applicable portions of Section 73 of the Standard Specifications.

All concrete shall be, as specified on the plans, Class 2 concrete, using Type II Modified Portland Cement, as per Section 90 of the Standard Specifications.

### B.      Construction

The subgrade beneath concrete improvements shall be prepared true to grade and cross-section. It shall be compacted to a minimum of 95 percent relative compaction. All soft and spongy material shall be removed to a depth of not less than six inches below subgrade elevation for all concrete improvements.

Prior to pouring any concrete the Contractor shall notify the inspector in order to have the forms inspected and approved. No concrete may be placed without the approval of the inspector.

Immediately upon stripping concrete forms and prior to backfill, all rock pockets or honeycombs shall be repaired to the satisfaction of the inspector.

### C.      Finish For Concrete Work

Curbs and mow strips - Trowel smooth and finish with a light brush.

Flat slabs and sidewalks - Medium broom finish.

D. Curing of Concrete Work

The pigmented curing compound method as described in Section 90 of the Standard Specifications shall be used for curing all concrete work. The cost of curing compound shall be included in the various concrete bid items. The Contractor shall be responsible for the condition of all concrete work until such time as the contract is finally accepted. The Contractor shall limit vehicular travel across newly poured concrete until such time as the concrete has achieved sufficient strength such that it can support the vehicle weight without being damaged. In no case, however, will vehicles be allowed to cross new concrete improvements until seven (7) calendar days have passed from the date that the concrete was placed.

E. Joints For Concrete Work

The subgrade beneath concrete improvements shall be prepared true to grade and expansion joints for all concrete improvements shall be constructed a minimum of every 45 feet and weakened plane joints shall be placed every 15 feet.

Expansion joints shall be filled with 1/2 inch thick premolded joint filler, for the full depth of the joint, conforming to the provisions of Section 51-1.12C of the Standard Specifications. Expansion joints shall be tooled with a 1/4-inch maximum radius edge.

73-1.02 Subgrade Preparation. - Subgrade shall conform to the requirements of Section 19 of these Special Provisions. The District may elect to verify compacted subgrade elevations by measurement made from adjacent existing improvements or by a template supported by forms.

73-1.06 Sidewalk, Curb, Gutter, Valley Gutter, Wheelchair Ramp, Mowstrip and Driveway Construction. - After the concrete has been placed, it shall be struck off to proper section and compacted with a grid of parallel metal bars until a layer of mortar not less than 3/8-inch thick has been brought to the surface. All new concrete surfaces shall be broom finished transversely to the line of pedestrian traffic or to the longest dimension of the concrete, as applicable.

73-1.08 Payment. - Payment for concrete improvements will be made as part of the contract lump sum amount. The price shall be full compensation for the work, complete in place, including all labor, materials, and tools required for forming, concrete placement, finishing, curing and all other items incidental to the work.

## SECTION 84 - TRAFFIC STRIPES AND PAVEMENT MARKINGS

84-3.01 Description. - Traffic stripes and pavement marking striping includes the painting of parking stall lines, cross hatching, lettering, disabled symbol and directional arrow and curb painting as shown on the construction plans. No paint shall be applied prior to issuance of the Engineer's written approval of the paint material. Paint on curbs, wheelstops, and hardscape shall be scraped clean of loose material prior to striping and painting.

84-3.02 Materials. - Paint shall be either Traffic Line Paint, Fast Dry, White, State of California Specification 8010-12F-04, or Traffic Line Paint, Rapid Dry, White, State of California 8010-12F-02. Blue paint shall be similar to white paint.

84-3.05 Applications. - Paint shall be applied such as to result in a thick uniform appearance that is not translucent. Provide two (2) coats of paint. The international symbol of accessibility shall be painted in blue on the surface of each parking space indicated and shall be a minimum of 3 foot square with a white symbol painted on a blue background. The stall lines for the disabled stall shall also be blue.

All parking lot painting shall be white unless otherwise indicated. Disabled stall aisles shall be striped in blue with a white disabled symbol on a blue background. All painted stall stripes shall be a minimum of

four (4) inches in width.

Traffic directional arrow and lettering locations are shown schematically on the construction plans. Arrows shall be centered, or double arrow centered within the traffic aisles and located at the approximate location shown on the plan. Arrow dimensions shown in the arrow detail are minimum dimensions. Arrow may be larger; however, it shall have the same proportions.

84-3.07 Payment. - Payment for traffic stripes and pavement markings will be made as part of the contract lump sum amount. The price shall be full compensation for the work, complete and in place, including all labor, materials and tools required for furnishing and installation of traffic striping and pavement markers and all other items incidental to the work.

END OF SECTION