

## SECTION 01282

# PAYMENT

### PART 1 GENERAL

#### 1.1 RELATED SECTIONS

- A. Section 00570: Definitions
- B. Section 00725: Scope of Work
- C. Section 00727: Control of Work

#### 1.2 REFERENCES

- A. Rental Rate Blue Book for Construction Equipment (Blue Book)

#### 1.3 SCOPE OF PAYMENT

- A. Department fully compensates Contractor as provided in the Contract for:
  - 1. Furnishing all materials, labor, equipment, tools, transportation, and incidentals required for completion of the work.
- B. Lump sum: Complete payment for the work described in the Contract when used as an item of payment.
- C. Department will not pay Contractor for:
  - 1. Work that is in excess of that contained in the Contract.
  - 2. Removal and replacement of defective work.
  - 3. Loss of anticipated profits.
- D. Neither partial payment nor release of retainage relieves the Contractor of the obligation to correct all defective work or materials.

#### **1.4 ALTERED QUANTITIES**

- A. When the accepted quantities of work vary from the estimated quantities in the Contract, the Department pays the original contract unit prices for the accepted quantities of work done.
  - 1. Department does not allow for any increased expenses, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense and subsequent loss of expected reimbursement or from any other cause.
  - 2. Request any cost adjustments in accordance with Section 00725.

#### **1.5 DIFFERING SITE CONDITIONS, CHANGES, EXTRA WORK**

- A. Department pays for differing site conditions, changes, and extra work performed under Section 00725 at unit price or lump sum as stipulated in the order authorizing the work.
- B. The Contractor's representative and the Engineer compare independent cost estimates to determine the cost of extra work.
- C. At the Engineer's request, provide a cost analysis for the extra work detailed as follows:
  - 1. Labor classifications, total hours for each classification, wage rate, and extension for each classification.
  - 2. Cost of fringe benefits and subsistence.
  - 3. Quantities of materials, prices, and extensions.
  - 4. Equipment classifications, total hours, rental rate, and extension for each unit of machinery and equipment.
  - 5. Transportation of materials and equipment.
  - 6. If applicable, subcontractors' cost analysis.

#### **1.6 FORCE ACCOUNT WORK - GENERAL**

- A. Instead of a unit price or lump sum basis specified above, the Department may require the Contractor to do such work on a force account basis.
- B. Department does not make additional allowance for:
  - 1. Timekeepers, bookkeepers, or other general office help.
  - 2. General superintendent except for the time spent in direct supervision of the force account work.
  - 3. The use of small tools (tools costing \$400 or less) or other costs for which no specific allowance is herein provided.

- C. Department does not pay for pickup trucks used solely for transportation.
- D. Department pays straight time for all hours worked. Overtime must have the prior written approval of the Engineer.

#### **1.7 FORCE ACCOUNT WORK - LABOR**

- A. Compensation for labor: Department pays for all labor, including direct supervision, used in the actual and direct performance of the work, at the rate of wage (or scale) agreed upon in writing before beginning work.
- B. Department reimburses for actual costs paid to or in behalf of workmen including subsistence and travel allowances and health and welfare required by collective bargaining agreements or other employment contract generally applicable to the classes of labor employed on the work.
  - 1. Department pays to Contractor an amount equal to 60 percent of the sum of the above items to cover the costs of bonds, insurance, taxes, etc.
  - 2. Submit wage, payroll, and cost records pertaining to work paid for on a force account basis to the Engineer. This information is open to inspection or audit.

#### **1.8 FORCE ACCOUNT WORK - MATERIALS**

- A. Department pays for all materials accepted by the Engineer and incorporated in the project at actual cost:
  - 1. Including sales taxes and transportation charges plus 15 percent.
  - 2. Excluding machinery rentals as hereinafter set forth.
- B. Include invoices with statements for all materials used. Certify by affidavit the cost of material furnished from Contractor's stocks when no invoice is available.

#### **1.9 FORCE ACCOUNT WORK - CONTRACTOR OWNED EQUIPMENT**

- A. Department pays for machinery or special equipment, excluding small tools, authorized by the Engineer at an hourly rate obtained from the "*Rental Rate Blue Book for Construction Equipment*," (Blue Book). These hourly rental rates are determined by the monthly rental rate taken from the above-mentioned publication divided by 176. Updated supplements are authorized for use Statewide on specified dates. Obtain this publication through:

Equipment Watch  
1735 Technology Drive, Suite 410  
San Jose, CA 95110-1313  
Phone: (800) 669-3282  
Fax: (408) 467-6795  
Refer to <http://www.udot.utah.gov/index.php/m=c/tid=719>.

- B. The total hourly rates derived from the above have been computed from equipment costs currently in effect. The rates derived do not include costs for operating personnel.
- C. The rates require adjustment by a Regional Factor and a Depreciation Factor.
- D. Equipment Rental rates can fall in the following two categories:
  - 1. Operating Rate - For those hours the equipment is actually in use. Includes ownership and operating costs. Adjust for depreciation and region factors.
  - 2. Standby Rate - Compensation for equipment required to be at the work site but not operating. This rate is 50 percent of the adjusted ownership costs computed above. The duration of allowable standby time is to be approved in writing by the Engineer with a maximum of eight hours per day or 40 hours in a normal week.
- E. When the "Manufacturer's Rated Capacity" falls between those shown in this manual, the Department uses the shown capacity that is closest to the manufacturer's. Do not interpolate for rates in between.
- F. Agree upon all rates in writing before beginning work.
- G. Obtain approval from the Office of Construction and Materials for any equipment rental rates not provided before the start of any "force account work."
- H. Department allows "move-in" and "move-out" transportation cost for a piece of equipment not available on the job, if the particular piece of equipment is not moved onto the job under its own power.
  - 1. Department allows hourly operating rate for equipment moved to the site under its own power.
  - 2. Department pays these charges only once for any particular piece of equipment except in unusual circumstances that must be justified in writing and agreed to by the Engineer.

### **1.10 FORCE ACCOUNT WORK - RENTED OR LEASED EQUIPMENT**

- A. When the equipment to be used is specialized in nature and is not available in the Contractor's inventory and is rented or leased from an outside source, Department adds a 10 percent allowance on the first \$5,000 plus five percent of the balance in excess of \$5,000 for overhead for all rented or leased equipment paid for by invoices.
  - 1. Where the rental rate charged exceeds the rate determined by the Blue Book, submit the rental or lease agreement to the Engineer for approval.
  - 2. Department pays equipment-operating costs at the rate from the Blue Book for rented or leased equipment for each hour the equipment was actually used.
  
- B. When the required equipment is in the Contractor's available inventory but not on the project site, the equipment may be rented from a local source. The Engineer may approve rental rates for equipment obtained from local sources when such rates are within 10 percent of the Blue Book. When the equipment is to be used less than a week, "move-in" and "move-out" costs for Contractor owned equipment may be considered when comparing rental costs of equipment obtained from local sources.
  - 1. This option is only allowed when the cost of locally rented equipment would be less than using Contractor owned equipment including "move-in" and "move-out" charges.
  - 2. Such rentals must be supported by a cost analysis indicating the method used was the least expensive.
  - 3. If the Contractor elects to rent equipment of a type that is in the Contractor's inventory and the rental costs exceed that allowed by this article, the Department reimburses for such equipment based on the Blue Book.

### **1.11 FORCE ACCOUNT WORK - SUBCONTRACTS**

- A. For all force account work performed under an approved subcontract, Department pays an additional allowance equal to ten percent of the first \$5,000 plus five percent of the balance in excess of \$5,000 for overhead for the subcontract.
  
- B. The Engineer reviews each situation to determine that performing the work by subcontract is justified.

### **1.12 FORCE ACCOUNT WORK - STATEMENTS**

- A. The Contractor's representative and the Engineer compare records of the cost of work done as ordered on a force account basis.

- B. At the Engineer's request, provide an itemized statement of the cost of the force account work detailed as follows:
  - 1. Name, classification, date, daily hours designating straight time and overtime, total hours, rate, and extension for each laborer and supervisor. (Payrolls may be used for part of this information.)
  - 2. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - 3. Quantities of materials, prices, and extensions.
  - 4. Transportation of materials and equipment.
  - 5. Cost of fringe benefits and subsistence.
  - 6. Subcontractors.

### **1.13 ELIMINATED ITEMS**

- A. If the Department determines items contained in the Contract are unnecessary, the Engineer eliminates the items from the Contract with a Change Order to the Contractor. This action does not invalidate the Contract.
- B. Request reimbursement for all costs incurred before notification of elimination. Refer to Section 00725.

### **1.14 PROGRESS PAYMENTS**

- A. Department makes progress payments at least once each month as the work is progressing.
- B. More frequent payments may be made during any period when the Department determines that the value of work performed during the period is of sufficient amount to warrant a payment.
- C. Payments are based on estimates prepared by the Engineer of the value of the work performed and materials in place under the Contract and for materials delivered under this Section, article, Payment for Material on Hand.
- D. Department makes no progress payment when the total value of the work done since the last estimate is less than \$1,000.
- E. From the total of the payable amounts, the Department deducts and retains five percent until after the entire Contract has been completed in an acceptable manner. When no less than 95 percent of the work has been completed, and with the consent of the Surety, the Engineer may prepare a semi-final estimate from which the Department retains 1½ percent of the original contract amount. The Department certifies the remainder for payment, less all previous payments.

- F. The Contractor may enter into an addendum agreement providing for the payment of retained monies into an escrow account, or the Department does so automatically.
  - 1. These monies are to be applied toward the purchase of approved securities that are to be held by an escrow agent until satisfactory completion of the construction Contract.
  - 2. The value of the securities placed in escrow has a minimum value equal to or greater than the amount that would otherwise be retained.
  - 3. The addendum agreement must be executed concurrently with the execution of the construction Contract. Agreement forms are available in the office of the Department's Engineer for Construction and Materials.
  
- G. The Department pays the Contractor within 14 calendar days after certification and approval of billings and estimates.
  - 1. Contractor and Engineer agree to a Saturday partial estimate closing date. Succeeding partial estimates close on the same Saturday for each succeeding month.
  - 2. Contractor approves partial estimate prior to submission.

#### **1.15 PAYMENT FOR MATERIAL ON HAND**

- A. When the Contractor presents delivery copies of invoices, the Department may include in the partial payment invoice, advance payments for acceptable nonperishable materials purchased expressly for incorporation in the work when delivered in the vicinity of the project, or stored in approved storage place.
  - 1. The Engineer determines the amount to be included in the estimate, but in no case will the amount exceed the value of the materials as shown on the delivery invoice, or 75 percent of the in-place price, whichever is less.
  - 2. When the approved storage location is other than the project site, furnish evidence that the stockpiled materials are irrevocably obligated to the project.
  - 3. Department does not pay when the invoice value of such materials, as determined by the Engineer, amounts to less than \$2,000 or if materials are to be stored less than 30 calendar days.
  - 4. Within 60 calendar days following the date of the estimate invoice on which the stockpile material is to be paid by the Department, furnish to the Engineer certified paid invoices or a certified statement with a copy of the check showing payment.
  - 5. Material will be removed from the next partial estimate as stockpiled materials if proper invoices showing payment to the supplier is not received.
  
- B. Department makes no partial payment on living or perishable materials until incorporated as specified in the Contract.

- C. Department does not pay for materials brought onto the site at the Contractor's election that may be incorporated into the project such as fuels, supplies, metal decking forms, ties, or supplies used to improve efficiency of operations.
- D. Approval of partial payment for stockpiled materials does not constitute final acceptance of such materials for use in completing items of work.
- E. Department purchases at actual cost and without any percentage allowance for profit, materials delivered to the project in compliance with the Contract or left unused due to changes in plans or variation in quantities, if the materials are not practicably returnable for credit.
  - 1. Purchased materials become the property of the Department.
  - 2. Actual costs are based on invoice price plus transportation costs to the work.
- F. Payment is limited to contract quantities unless ordered by the Engineer. Assume responsibility for excess materials delivered to the project, or aggregate produced beyond the contract amount without authority from the Engineer.
- G. At the option of the Department, surplus aggregates up to the contract quantities may be purchased provided:
  - 1. The material is stockpiled where directed.
  - 2. The material meets specification requirements when stockpiled.
- H. Department pays for material accepted on an agreed price basis, which price is normally the Contractor's production cost. In addition, the Department pays the cost to haul the materials to the stockpile site and place in pile at the rate of 9 cents per ton mile or 20 cents per cubic yard mile.

## **1.16 FINAL PAYMENT**

- A. When the project has been accepted in accordance with Section 00727, the Engineer prepares the final estimate of work performed.
  - 1. If the Contractor approves the final estimate or does not object to the quantities within 30 calendar days of receiving the final estimate, the Department processes the estimate for final payment.
  - 2. After approval of the final estimate by the Contractor, Department pays for the entire sum due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the Contract.
- B. If additional payment is due from the Department, file with the Department a full, complete, and itemized written statement justifying the adjustment within 30 calendar days after the final estimate is submitted for approval.
  - 1. All disputes not itemized in said statement are waived by the Contractor.

2. Submission of disputes by the Contractor will not be reason for withholding full payment of the total value of work shown on the Engineer's final estimate.
  3. The Department evaluates the dispute. If it is determined that additional payment is due, the final estimate is revised accordingly, under the terms of the Contract. If not, the estimate as submitted is final.
- C. All prior partial estimates and payments are subject to correction in the final estimate and payment.
- D. The Department has the final estimate complete and to the Contractor within 90 days of when the Contractor reaches Contract Completion.

### **1.17 ADJUSTMENTS FOR FUEL COST**

- A. This price adjustment provision is intended to minimize risk to the Contractor due to potential volatile price fluctuations for fuel that might occur throughout the duration of the Contract.
1. The Contractor may invoke this provision at any time during the Contract by written notification to the Engineer.
  2. Adjustments are then made on all prior and future partial estimates. When this provision becomes effective, it remains in effect for the duration of the Contract.
- B. This provision is not designed to estimate actual quantities of fuel used in construction operations, but to provide a reasonable basis for calculating a fuel price adjustment based on average conditions.
- C. Department determines compensation adjustments under the provisions of this Section, and presumes that the Contractor has relied on these provisions for compensation adjustments when determining unit bid prices.
- D. Terms for calculating adjustments for fuel costs:
1. Fuel Partial Estimate Base Price (EP): - The average of all base prices determined during the partial estimate period.
    - a. The Department determines the base price per barrel for crude on the first working day of each week, using postings from the commodities and futures section of the Wall Street Journal for West Texas Intermediate (WTI) crude using the spot price for that date as a basis.
    - b. A conversion factor of 42 gallons per barrel is used.
  2. Fuel Contract Base Price (CP): The base price determined for the week during which the bid opening is held. The source of the price is the same as that used for the (EP).

3. Fuel Usage Factors (FU): A combined diesel and gasoline factor. Table 1 contains the items for which adjustments may be made, and the fuel usage factors upon which the adjustment is based.
- E. Determining Adjustments (AF): The Engineer computes the adjustments separately for each partial estimate period. The adjustment is determined based on appropriate items in Table 1 using the formula with the following constraints.
1. The Partial Estimate Base Price must change plus or minus 15 percent from the Contract Base Price before an adjustment is made, then add or deduct five percent per the formula.
  2. Engineer adjusts only major contract items as defined by Section 00570, or items that have an individual value of \$100,000 or more based on original contract quantities.
  3. Adjustments in compensation may be either plus or minus depending on the differences between the Contract Base Price and the Partial Estimate Base Price.
- F. Work beyond Contract time: Adjustment will not apply to any work performed after the expiration of contract time plus approved time extensions.
- G. Upward Ceiling: If the Partial Estimate Base Price increases by more than 50 percent from the Contract Base Price for an adjustable bid item, the Department determines whether it is feasible for the remainder of the project to proceed, and notifies the Contractor in writing if the project is to be terminated.
- H. Adjustment Formula:

EP greater than CP:

$$AF = \frac{[(EP - CP) - 0.05 CP] Q (FU)}{42}$$

EP less than CP:

$$AF = \frac{[(EP - CP) + 0.05 CP] Q (FU)}{42}$$

Where:

EP	=	Partial Estimate Base Price per barrel (dollars)
CP	=	Contract Base Price per barrel (dollars)
Q	=	Quantity of Acceptable Work Performed on Item
FU	=	Fuel Usage Factor for that Item
AF	=	Adjustment for Fuel Costs in Dollars
42	=	Gallons per Barrel of Crude

**Table 1**  
**Adjustable Items and Fuel Usage Factors**

<b>Item of Work</b>	<b>Quantity of Work (Q)</b>	<b>Combined Diesel &amp; Gasoline Usage Factor (FU)</b>
Roadway Excavation, Borrow, Embankment, Granular Borrow, Top Soil	Cubic Yard Ton	0.45 0.25
Riprap	Cubic Yard	0.57
Underdrain Granular Backfill	Cubic Yard	1.16
Untreated Base Course	Ton Cubic Yard	0.84 1.63
Hot Mix Asphalt	Ton Cubic Yard	3.60 7.20
Stone Matrix Asphalt (SMA)	Ton Cubic Yard	3.60 7.20
Rotomilling	Sq Yd-In	0.03
Open-Graded Surface Course	Cubic Yard Ton	7.20 3.60
Cover Material Placed	Ton	0.64
Portland Cement Concrete Pavement	Sq Yd-In	0.214
Lean Concrete Base Course	<b>Sq Yd-In</b>	0.048
Structures (includes: Concrete, Piles, Reinforcing Steel, Structural Steel) Pipe Culvert Special Pipe Culvert (Includes excavation for structures) Underdrains Right-of-Way Fence & Gates Seeding Concrete Small Structures Portland Cement Concrete Pavement Marking Paint Precast Concrete Barrier Guardrail	\$	0.038 Gal

## 1.18 ADJUSTMENT FOR ASPHALT MATERIALS

- A. This price adjustment provision is intended to minimize risk to the Contractor due to potential volatile price fluctuations for asphalt materials that might occur throughout the duration of the Contract.
  - 1. The Contractor may invoke this provision at any time during the Contract by written notice to the Engineer.
  - 2. Department then adjusts future partial estimates. When this provision becomes effective it remains in effect for the duration of the Contract.
- B. Department adjusts the price of asphalt materials for work done on bid items that contain asphalt materials, including asphalt cement, liquid asphalt, and emulsified asphalt.
- C. Department determines compensation adjustments under the provisions of this Section, and presumes that the Contractor has relied on these provisions for compensation adjustments when determining unit bid prices.
- D. Terms for calculating adjustments for asphalt materials are as follows:
  - 1. Asphalt Partial Estimate Base Price (EP): The average of all the base prices determined during the partial estimate period.
    - a. On the first working day of each week, the Department determines the base price per barrel for crude oil using postings from the commodities and futures section of the Wall Street Journal for West Texas Sour (WTS).
    - b. A conversion factor of 5.6 barrels per ton is used.
  - 2. Asphalt Contract Base Price (CP) - The base price determined for the week during which the bid opening is held is the Contract Base Price. The source of the price is the same as that used for the (EP).
- E. Determining Adjustments (AF): The Engineer computes the adjustments separately for each partial estimate period. The adjustment on each item is determined using the formula with the following constraints.
  - 1. The Partial Estimate Base Price of asphalt materials must change plus or minus 15 percent from the Contract Base Price before an adjustment is made, then add or deduct 5 percent per the formula.
  - 2. Adjustments in compensation may be either plus or minus depending on the differences between the Contract Base Price and the Partial Estimate Base Price.
- F. Work beyond Contract time: Adjustment will not apply to any work performed after the expiration of contract time plus approved time extensions.

G. Upward Ceiling: If the Partial Estimate Base Price increases by more than 50 percent from the Contract Base Price for an adjustable bid item, the Department determines the feasibility for proceeding with the remainder of the project and notifies the Contractor in writing if the project is to be terminated.

H. Adjustment Formula

EP greater than CP:

$$AF = [(EP - CP) - 0.05 CP] (5.6) Q$$

EP less than CP:

$$AF = [(EP - CP) + 0.05 CP] (5.6) Q$$

Where:

EP = Partial Estimate Base Price per barrel (dollars)

CP = Contract Base Price per barrel (dollars)

Q = Quantity in ton of Asphalt Materials used

AF = Adjustment for Asphalt Costs in dollars

5.6 = Barrels per ton of Asphalt

The Engineer calculates the tons of asphalt product that will be Q in the above equation for the following:

HMA (Hot Mix Asphalt)

Open-Graded Surface Course

Emulsified Asphalts

Cutback Asphalts

**PART 2      PRODUCTS      Not used**

**PART 3      EXECUTION      Not used**

END OF SECTION