### **SECTION 01150**

#### MEASUREMENT AND PAYMENT

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

- A. For lump sum items, payment shall be made to the Contractor in accordance with an accepted Progress Schedule and Schedule of Values on the basis of actual work completed.
- B. For unit-price items, payment shall be based on the actual amount of work accepted and for the actual amount of materials in place, as shown by the final measurements.
  - 1. All units of measurement shall be standard United States convention as applied to the specific items of work by tradition and as interpreted by the Engineer.
  - 2. At the end of each day's work, the Contractor's Superintendent or other authorized representative of the Contractor shall meet with the Resident Project Representative and determine the quantities of unit price work accomplished and/or completed during the work day.
  - 3. The Resident Project Representative will then prepare two "Daily Progress Reports" which shall be signed by both the Resident Project Representative and Contractor's Representative.
  - 4. Once each month the Resident Project Representative will prepare two "Monthly Progress Summation" forms from the month's accumulation of "Daily Progress Reports" which shall also be signed by both the Resident Project Representative and Contractor's Representative.
  - 5. These completed forms will provide the basis of the Engineer's monthly quantity estimate upon which payment will be made. Items not appearing on both the Daily Progress Reports and Monthly Progress Summation will not be included for payment. Items appearing on forms not properly signed by the Contractor will not be included for payment.
  - 6. After the work is completed and before final payment is made therefor, the Engineer will make final measurements to determine the quantities of various items of work accepted as the basis for final settlement.
- C. For Cash Allowances, a scope of work will be determined in the field for contractor pricing. Upon agreement between Owner and Contractor on price for work, payment will come from cash allowances established on the Bid Form.

## 1.2 <u>SCOPE OF PAYMENT</u>

A. Payments to the Contractor will be made for the actual quantities of the Contract items performed and accepted in accordance with the Contract Documents. Upon completion of the construction, if these actual quantities show either an increase or

- decrease from the quantities given in the Bid Form, the Contract unit prices will still prevail.
- B. The Contractor shall accept in compensation, as herein provided, in full payment for furnishing all materials, labor, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced by the Contract; also for all loss or damage arising from the nature of the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the Work and until its final acceptance by the Engineer, and for all risks of every description connected with the prosecution of the work, except as provided herein, also for all expenses incurred in consequence of the suspension of the work as herein authorized.
- C. The payment of any partial estimate or of any retained percentage except by and under the approved final invoice, in no way shall affect the obligation of the Contractor to repair or renew any defective parts of the construction or to be responsible for all damage due to such defects.

# 1.3 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

A. When alterations in the quantities of work not requiring supplemental agreements, as hereinbefore provided for, are ordered and performed, the Contractor shall accept payment in full at the Contract price for the actual quantities of work done. No allowance will be made for anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as stipulated in such agreements.

# 1.4 OMITTED ITEMS

A. Should any items contained in the bid form be found unnecessary for the proper completion of the work contracted, the Engineer may eliminate such items from the Contract, and such action shall in no way invalidate the Contract, and no allowance will be made for items so eliminated in making final payment to the Contractor.

## 1.5 PARTIAL PAYMENTS

A. Partial payments shall be made monthly as the work progresses. Partial payment shall be made subject to the provisions of the General and Supplementary Conditions.

## 1.6 PAYMENT FOR MATERIAL DELIVERED

- A. When requested by the Contractor and at the discretion of the Owner, payment may be made for all or part of the value of acceptable, non-perishable materials and equipment which are to be incorporated into bid items, have not been used, and have been delivered to the construction site or placed in storage places acceptable to the Owner. Payment shall be subject to the provisions of the General and Supplementary Conditions.
- B. No payment shall be made upon fuels, supplies, lumber, false work, or other materials, or on temporary structures or other work of any kind which are not a permanent part of the Contract.

## 1.7 FINAL PAYMENT

A. The Engineer will make, as soon as practicable after the entire completion of the project, a final quantity invoice of the amount of the Work performed and the value of such Work. Owner shall make final payments of the sum found due less retainages subject to the provisions of the General and Supplementary Conditions.

## 1.8 INCIDENTAL WORK

- A. Incidental work items for which separate payment is not made include (but are not limited to) the following items:
  - 1. Clearing, grubbing and stripping
  - 2. Dust control
  - 3. Dewatering
  - 4. Clean-up
  - 5. Erosion control
  - 6. Loam and seeding
  - 7. Restoration of property, and replacement of fences, curbs, structures and other minor items disturbed by the construction activities.
  - 8. Coordination with the Owner, Utilities and others, including related inspection cost (refer to Section 01050)
  - 9. Utility crossings and relocations, unless payment is otherwise made
  - 10. Traffic Regulation
  - 11. Steel and/or wood sheeting as required, including that left in place
  - 12. Project record documents
  - 13. Materials testing
  - 14. Construction schedules, bonds, insurance, shop drawings, warranties, guarantees, certifications, and other submittals required by the Contract Documents
  - 15. Repair and replacement of utilities damaged by construction activities and corresponding proper disposal of removed materials
  - 16. Temporary utilities for construction and to maintain existing service during construction
  - 17. Quality assurance testing
  - 18. Temporary construction and other facilities not to be permanently incorporated into the Work necessary for construction sequencing and maintenance of operations (i.e., Temporary dechlorination building/shelter, building systems, and associated pumps, pipe, valves, storage tanks, controls and instrumentation)
  - 19. Weather protection
  - 20. Permits (electrical, plumbing, etc.)
  - 21. Visits to the Project site or elsewhere by personnel or agents of the Contractor, including manufacturer's representatives, as may be required.
  - 22. On-site and other facilities acceptable to Engineer for the storage of materials, supplies and equipment to be incorporated into the Work

- 23. Facilities start-up services required by the Contract Documents.
- 24. Mobilization/demobilization.
- 25. Test pits to determine existing utility locations, soils conditions, and as required to complete the project.
- 26. Engineer's Temporary Field Office
- 27. Pipe Markings
- 28. Removal of Existing Pavement
- 29. Earthwork (except ledge)
- 30. Bypass pumping
- 31. Preconstruction photographs

## 1.9 DESCRIPTION OF PAY ITEMS

- A. The following sections describe the measurement of and payment for the work to be done under the respective items listed in the Bid Form.
- B. Each unit or lump-sum price stated in the Bid Form shall constitute full compensation, as herein specified, for each item of the work completed.

# <u>Item 1. Demolition of Existing and Construction of New Disinfection & Dechlorination Systems, Complete.</u>

- A. Method of Measurement: Lump Sum
- B. Basis of Payment: Payment of the lump sum price, for Item 1, shall be full compensation for furnishing all labor, materials, tools and equipment required for upgrading of the treatment facility, complete as indicated on the Drawings and as specified, along with all appurtenances in their entirety.

#### Item 2. Truck Scale Relocation

- A. Method of Measurement: Cash Allowance
- B. Basis of Payment: The Owner has allocated a sum of money to be used for relocation of the existing truck scale in the existing Dechlorination Building (new Hypochlorite Building). The new location of truck scale shall be determined in the field during construction by the Owner, Engineer and Contractor. The base bid shall include the cost for demolition of the truck scale and appurtenances from the existing building. The allowance is associated with the cost of re-establishing the scale in a new location. Once the location is determined, the Contractor shall provide a written cost estimate complete with full itemized cost breakdown for the work. The estimate as accepted by the Owner will establish the actual cost for the work. Payment for this work shall be made under this bid item.

#### END OF SECTION