

**SPECIFICATIONS - DETAILED PROVISIONS**  
**Section 00230 - Construction Surveying**

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**SECTION 00230  
CONSTRUCTION SURVEYING**

**PART 1 - GENERAL**

1.01 DESCRIPTION

Construction Surveying is that field survey work required for the preliminary engineering involved in the design of a specific construction contract and/or that construction staking required during the project construction phase, and includes any follow-up surveying or staking required to confirm as-built conditions or to replace monuments lost during construction, and any pertinent office preparation. Construction Surveying as utilized under this specification does not include surveying or field work involved in general mapping or otherwise related to general planning.

1.02 DEFINITIONS

- A. District shall mean the Eastern Municipal Water District, and shall include authorized representatives of the Eastern Municipal Water District.
- B. Consultant shall collectively mean the individual or firm contracting with the District to perform the surveying required by the contract.

Consultant shall be considered the prime contractor. In the event Consultant is an engineering firm contracting with a surveying firm for the actual surveying, the surveying firm shall be considered a subcontractor.

1.03 REQUIREMENT

- A. Prevailing Wage. In accordance with the provisions of the California Labor Code Section 1773.2, the Director of Industrial Relations has ascertained the general prevailing rates of wages and the general prevailing rates for legal holiday and overtime work in Riverside County. Copies of said rates are on file at the office of the District, which copies shall be made available for review to any interested party on request. Consultant shall post, or shall require the posting by the subcontractor of such determinations at the job site.
- B. Travel and Subsistence Payments shall be made to each worker as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with the requirements of Section 1773.8 of the California Labor Code.

- C. Penalty for Payment Violations. Consultant shall forfeit, or require the forfeit by his subcontractor as a penalty to the District \$25.00 for each calendar day, or portion thereof, for each worker paid less than the said stipulated prevailing rates for any work done under the contract, in violation of the provisions of the California Labor Code Section 1775 for transmittal to the State Treasurer 90 days after acceptance of the work. Consultant shall pay, or require the subcontractor to pay the difference between such prevailing wage rates and the amount paid each affected worker.
- D. Payroll Records/Apprentice Employment/8-Hour Day. It is the responsibility of the Consultant to maintain and make available, or to require the subcontractor to maintain and make available accurate payroll records pursuant to the requirements of Labor Code Section 1776; and to meet the apprentice employment requirements of Section 1777.5; and to adhere to the 8-hour legal days work and overtime pay requirements of Section 1810 through 1813 and 1815.
- E. Insurance Required. Consultant shall not commence work under this contract until he has obtained all policies of insurance required hereunder, nor shall he allow any subcontractor to commence work on his subcontract, until all policies of insurance required of the subcontractor have been obtained.

Consultant shall, during the life of this contract, notify District in writing of any incident, either under his jurisdiction, or any of his subcontractors, giving rise to any potential Bodily Injury or Property Damage claim and any resultant settlements, whether in conjunction with this or any other project which may affect the limits of the required coverage, as soon as is reasonable and practical.

Consultant shall take out and maintain the required insurance policies at his sole cost and expense at all times during the life of this contract. Each such policy of insurance shall:

1. Be produced by agents/brokers which are licensed to transact insurance business in the State of California;
2. Be issued by insurance carriers which are:
  - a) Licensed by the State of California to write business in this state; and,
  - b) Rated no less than "A-, Class VIII" or better by the A.M. Best Company;

Any insurance carrier which is strategically affiliated with a parent insurance company or insurance group, must disclose the name of the parent company or group in any certificate of insurance documentation provided to the District.

Non-admitted/Surplus Lines insurance carriers (carriers not licensed in the State of California), may be acceptable to the District under certain conditions. Non-admitted insurance carriers providing any form of insurance coverage must be:

- c) Domiciled in the United States; and,
- d) Listed as an approved insurance carrier on the California Department of Insurance L.E.S.L.I. list; and,
- e) Rated no less than "A-, Class VIII" or better by the A.M. Best Company.

The District reserves the right to disqualify any non-admitted insurer at any time without cause.

- 3. Name and list the District as "Additional Insured", by an endorsement executed by the insurance carrier; (this requirement does not apply to Professional Liability)
- 4. Specify that it acts as primary insurance and that no insurance held or owned by the additional insured shall be called upon to cover a loss under said policy;
- 5. Not be canceled, reduced in coverage or limits until thirty (30) days after receipt by the District of a written notice of such cancellation or reduction of coverages or limits, as evidenced by receipt of a registered letter;
- 6. Show evidence of renewal of an expiring policy once the insurance has been approved by the District. Prior approval must be obtained if the coverage or limits of the policy or the carrier has changed.

**Workers' Compensation Insurance.** The District requires that Consultant cover his employees as required by Section 3700 of the Labor Code of the State of California, and Consultant shall require all subcontractors similarly to provide such workers' compensation insurance for all subcontractor's employees. Such policy shall contain an endorsement which waives all right of subrogation against the District as designated in the policy of General Liability Insurance.

**Professional Liability Risks and Insurance Limits.** The District requires Consultant to insure against consequences of a professional act, error or omission and to provide the District with evidence that the following policies and limits are in force:

Workers' Compensation	Statutory
General Liability	\$1,000,000
Professional Liability	\$1,000,000
Automobile Liability	\$1,000,000

1.04 PAYMENT

Payment shall be made pursuant to receipt of billing to be submitted within 35 days following performance of the work, clearly identifying the work performed and the billing period covered by the invoice, and indicating agreement number, work order or construction order numbers, accompanied by daily time sheets for field work when applicable.

**PART 2 - PRODUCTS**

2.01 MATERIALS

All materials required for any construction surveying performed under this specification shall be furnished by and at the expense of Consultant as a part of the of the contract under which the work is performed.

**PART 3 - EXECUTION**

3.01 DIRECTION OF WORK

Except as otherwise stated in the Agreement, all work shall be under the direction of one of the following District representatives. Questions relative to the specific work shall be directed to that representative.

- A. The appropriate Designer of the project; in general this will be the originator of the agreement.
- B. The Engineering Inspection Supervisor or his designate for construction staking; in general this will be the Inspector.

3.02 PERFORMANCE

- A. Field Notes: Consultant shall supply District in electronic format and hard copy with the following:
  - 1. Raw data file of all pertinent survey work, complete with descriptor code listing.
  - 2. An ASCII coordinate file listing point number, northing, easting, and elevation (P,N,E,Z) of all points in the survey. These data shall be delimited by commas.
  - 3. A drawing file of any topographic surveys. Various layers shall be supplied as required by the Special Conditions or in the Request for Proposal.

- B. Monuments: Prior to construction, consultant shall field locate all street centerline and other survey monuments likely to be disturbed by construction of this project and shall be perpetuated to conformance with 8771 of the Business and Professional Code (Professional Land Surveyor's Act). A completed Corner Record showing at least four ties for each point shall be prepared by a licensed land surveyor and submitted to the Riverside County Surveyor prior to any construction. After construction, a subsequent Corner Record shall be filed with the Riverside County Surveyor for the replacement of any monument that has been destroyed, damaged, covered, obscured, or otherwise obliterated by the construction as stated by the Board of Registration for Professional Engineers and Land Surveyor's letter dated February 28, 1997.
- C. Construction Stakes: Construction stakes shall be set as specified on the drawings, in the Specifications, or in the survey agreement or task order.
- D. Grade Sheets: Typed grade sheets for construction staking must be complete, listing all locations, offsets, etc., and shall be delivered promptly and prior to construction. Three copies shall be delivered to the District inspector for distribution to the construction contractor, and one copy shall be delivered directly to the E.M.W.D. office for the project file. This letter may be faxed. (Fax # (909)-928-6111).
- E. All submitted field notes shall become the property of District. Copies of all field notes including recorded Corner Record must be submitted to EMWD prior to final invoicing by the consultant.

**END OF SECTION 00230**

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