

## SECTION 01090

### SOURCES FOR REFERENCE PUBLICATIONS

09/98

NOTE: This guide specification provides a listing of organizations whose publications are referenced in other sections of the specifications. This guide specification is to be used in the preparation of project specifications in accordance with ER 1110-345-700. Comments and suggestions on this guide specification are welcome and should be directed to the proponent of the specification. A listing of proponents, including their organization designation and telephone number, is at URL <http://www.hnd.usace.army.mil/techinfo/index.htm>, and an electronic feedback page for submission of recommended changes is available at the same address. Use of electronic communication is encouraged.

#### PART 1 GENERAL

##### 1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the sponsoring organization, e.g. UL 1 (1993; Rev thru Jan 1995) Flexible Metal Conduit. However, when the sponsoring organization has not assigned a number to a document, an identifying number has been assigned for convenience, e.g. UL's unnumbered 1995 edition of their Building Materials Directory is identified as UL-01 (1995) Building Materials Directory. The sponsoring organization number (UL 1) can be distinguished from an assigned identifying number (UL-01) by the lack of a dash mark (-) in the sponsoring organization assigned number.

##### 1.2 ORDERING INFORMATION

NOTE: Sponsoring organization information was current as of the date of this section. This paragraph is automatically edited to fit the project when the project specifications are produced through SPECSINTACT; however, if publications of organizations in addition to those listed below are used in the project, such additional organizations must be added to this paragraph. The addresses of the organizations whose publications are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the sponsoring organization should be ordered from the source by title rather than by number.

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NOTE: AASHTO documents with numbers beginning with M or T are available only in Standard Specifications for Transportation Materials and Methods of Sampling and Testing, 1997 @\$289.00

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MEASUREMENT AND PAYMENTS

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## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

### AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 615/A 615M	(1996a) Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM C 127	(1988; R 1993) Specific Gravity and Absorption of Course Aggregate
ASTM C 128	(1993) Specific Gravity and Absorption of Fine Aggregate
ASTM D 1250	(1980; R 1990) Petroleum Measurement Tables

## 1.2 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Weight Certificates; FIO.

Submit certified weight certificates for M 90 R 200 Riprap.

## 1.3 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

### 1.3.1 RAISE/LOWER UTILITY COVERS

Payment for raise utility covers will be made at the applicable contract price, which payment shall constitute full compensation.

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### 1.3.2 SOIL SAMPLING

Work specified will be measured for payment by the number of samples actually taken and the number of reports actually prepared, as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per Item "Soil Sampling and Testing" and Item "Soil Reports, as applicable, The price shall constitute full compensation for all costs in connection therewith.

### 1.3.3 EARTHWORK

Work specified will be measured for payment by the number of cubic yards of

material excavated and the number of cubic yards of fill placed and compacted, except for subbase removal which will be measured by the square yard, as indicated on the drawings and approved when completed. Payment will be made at the contract unit price per cubic yard for Item, "Excavation", "Embankment", "Excavation of Unsuitable Material", "Hauling of Unsuitable Material", and "Select Fill Material", as applicable. Payment will be made at the contract unit price per square yard for Item, "Subbase 6". The Price shall constitute full compensation for all costs in connection therewith.

#### 1.3.4 DITCH GRADING

Work specified will be measured for payment by the lineal feet of ditch grading and reconstruction accomplished, as indicated by the Task Order when issued and approved when completed. Payment will be made at the applicable contract price per lineal foot. The Price shall constitute full compensation for all costs in connection therewith.

#### 1.3.5 PATCHING ASPHALT PAVEMENT

Work specified will be measured for payment by the number of square yards of areas patched as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per square yard for Item "Patching Asphalt Pavement", which price shall be full compensation for all costs in connection therewith including cutting, removal and compaction.

#### 1.3.6 ASPHALT PAVEMENT, OVERLAY

Work specified will be measured for payment by the number of square yards of material placed, as indicated on the drawings and approved when completed. Payment will be made at the applicable contract unit price per Item "Asphalt Pavement", which price shall constitute full compensation for all costs in connection therewith.

#### 1.3.7 ASPHALT PAVEMENT, FULL THICKNESS

Work specified will be measured for payment by the number of square yards

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of bituminous material placed and compacted as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per square yard for Item "Asphalt Pavement, Full Thickness", which price shall be full compensation for all costs in connection therewith.

#### 1.3.8 TACK COAT, BITUMINOUS

Work specified will be measured for payment by the number of square yards of bituminous material placed as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per square yard for Item "Slurry Seal Coating", which price shall be full compensation for all costs in connection therewith.

#### 1.3.9 PRIME COAT, BITUMINOUS

Work specified will be measured for payment by the number of square yards of bituminous prime coat applied as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per square yard for Item "Prime Coat, Bituminous", which price shall be full compensation for all costs in connection therewith.

1.3.10 PAVEMENT REINFORCING FABRIC

Work specified will be measured for payment by the number of square yards applied as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per Item "Pavement Reinforcing Fabric", which price shall be full compensation for all costs in connection therewith.

1.3.11 PAVEMENT MARKINGS

1.3.11.1 Striping and Reflective Material

Work specified will be measured for payment by the number of square feet applied as indicated on the drawings and approved when completed. Payment will be made at the applicable contract price per square yard for Item "Striping and Marking", which price shall be full compensation for all costs in connection therewith.

1.3.11.2 Prismatic Reflective Markers

Work specified will be measured for payment by the number of reflectors put in place and approved when completed. Payment will be made at the applicable contract price for Item "Prismatic Reflective Markers, surface mounted and/or recessed", which price shall be full compensation for all costs in connection therewith.

1.3.12 MILLING

Work specified will be measured for payment by the number of square yards of areas completed and approved when completed. Payment will be made at the applicable contract price per square yard for Item "Milling of AC", which price shall be full compensation for all costs in connection therewith.

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1.3.13 FOREIGN OBJECT REMOVAL (FOD)

Work specified will be measured for payment by the number of hours of area cleared and approved when completed. Payment will be made at the applicable contract price per hour for Item "FOD", which price shall be full compensation for all costs in connection therewith.

1.3.14 SIDEWALKS

Work specified will be measured for payment by the number of linear feet of areas completed and approved. Work to include all incidental work, such as, setting grade, subgrade preparation and etc.

1.3.15 CURB & GUTTER (concrete)

Work specified will be measured for payment by the number of linear feet of areas completed and approved. Work to include all incidental work, such as, setting grade, backfilling, etc.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --



## SECTION 01300

### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

The following requirements will be applicable for each Task Order (T. O.).

##### 1.1 SUBMITTAL CLASSIFICATION/IDENTIFICATION

Throughout the specifications submittals may be identified with the prefix "SD" followed by a number. This number and prefix are for book keeping and record sorting in the system. The SD stands for submittal data and the number is a category, e.g., data, drawings, reports, etc. The submittal register shows either the title of the item being submitted or the number and title of the item being submitted. These numbers, if used, may be different in different sections of these specifications for items with the same title. Cost for providing submittals are included in the contractor's fully burdened labor rates and will not be priced separately.

1.1.1 SD-01 Data: Submittals which provide calculations, descriptions, or documentation regarding the work.

1.1.2 SD-04 Drawings: Submittals which graphically show relationship of various components of the work, schematic diagrams of systems, details of fabrication, layouts of particular elements, connections, and other relational aspects of the work.

1.1.3 SD-06 Instructions: Preprinted material describing installation of a product, system or material, including special notices and material safety data sheets, if any, concerning impedances, hazards, and safety precautions.

1.1.4 SD-07 Schedules: Tabular lists showing location, feature, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

1.1.5 SD-08 Statements: A document, required of the Contractor, or through the Contractor, from a supplier, installer, manufacturer, or other lower tier Contractor, the purpose of which is to confirm the quality or orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel, qualifications, or other verifications of quality.

1.1.6 SD-09 Reports: Reports of inspections or tests, including analysis and interpretation of test results. Each report shall be properly identified. Test methods used shall be identified and test results shall be recorded.

1.1.7 SD-13 Certificates: Statements signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting the product, system or material meets specified requirements.

The statements must be dated after award of this contract, must state the Contractor's name and address, must name the project/Task Order and location, and must list the specific requirements which are being certified.

1.1.8 SD-14 Samples: Samples, including both fabricated and un-fabricated physical examples of materials, products, and units of work as complete units or as portions of units of work.

1.1.9 SD-18 Records: Documentation to record compliance with technical or administrative requirements.

1.1.10 SD-19 Operation and Maintenance Manuals: Data which forms a part of and Operation and Maintenance manual.

### 1.1.11 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

#### 1.1.11.1 Government Approved (GA)

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

#### 1.1.11.2 For Information Only (FIO)

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

### 1.2 SUBMITTAL REVIEW AND APPROVAL

Before submission, Contractor shall review all submittals prepared by subcontractors, suppliers, and himself, for completeness, accuracy, and compliance with plans and specifications. Contractor shall not use red markings on submittals. Red markings are reserved for use by the Contracting Officer. Approval by Contractor shall be indicated on each drawing by an "Approved" stamp with Contractor's name, signature, and date. The Contractor shall have independent agents not associated with his organization to do the review. The review shall be done by a licensed architect or registered engineers in the appropriate disciplines of architectural, civil, structural, mechanical and electrical, as appropriate. The reviews shall be thorough and complete and authenticated by registered engineer's or architect's stamp. This administration of submittal review must be integrated into the Contractor's Quality Control Plan. The plan must delineate in precise detail how the Contractor intends to satisfy this requirement. This should include names of organizations, qualifications and names of individuals who will be doing the work with their qualifications/resumes. Supplier's or subcontractors certifications are not acceptable as meeting this requirement of independent review. Submittals not conforming to the requirements of this section will be returned to the Contractor for correction and resubmittal.

### 1.3 GOVERNMENT APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

### 1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

### 1.5 PAYMENT FOR ITEMS FOR WHICH A SUBMITTAL AND APPROVAL IS REQUIRED

In accordance with FAR 52.232-5, "Payment Under Fixed-Price Construction Contract", the Government shall make progress payments to the Contractor monthly based on estimates of work accomplished which meets the standards of quality established under the contract. On items for which submittals must be approved by the

Contracting Officer, payment cannot be made for the item until the Government establishes that the item "meets the standards of quality" required by the contract. The Contractor shall not invoice for, nor shall the Government make payment for any item, for which submittal and approval is required, until the item has been submitted and approved as described herein.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

### 3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) representative and each item shall be stamped, signed, and dated by the CQC representative indicating action taken in accordance with paragraph 1.2 SUBMITTAL REVIEW AND APPROVAL. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one sample of ENG Form 4288 listing representative items of equipment and materials for which submittals may be required by the specifications. Columns "d" through "p" have been completed by the Government. The Contractor shall complete columns "a," through "c," and "r" thru "t" and return two (2) completed copies to the Contracting Officer for approval within thirty (30) calendar days after Notice to Proceed. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated. The Contractor will insure that any errors in draft ENG Form 4288 and any omissions are added prior to submission for approval.

### 3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 35 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

### 3.4 TRANSMITTAL FORM (ENG FORM 4025)

The Contractor shall complete ENG Form 4025, "Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificates of Compliance" and forward four (4) copies of same with each set of shop drawings, certificates of compliance, materials, fixtures and equipment lists submitted for approval. Three (3) copies of the ENG Form 4025 shall be submitted for information only data. No translucent or coated reproduced copies will be accepted.

Each item submitted shall be listed separately on the ENG Form 4025. For new submittals or resubmittals mark the appropriate box; or resubmittals also insert previous transmittal number. More specific instructions on the use of ENG Form 4025, "Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's

Certificates of Compliance" shall be furnished at the Preconstruction Conference. Blank ENG Forms 4025 will be furnished by the Contracting Officer on request. Shop drawings shall be either blue line or black line prints on a white background. Blueprints are not acceptable. Each submittal shall be identified with the Contractor's name, Contract Number, Transmittal Number, and Item Number to correspond with Item Number listed on ENG form 4288. The following identification shall be marked on submittals as applicable:

- Contract Number
- Project Title and Location
- Subcontractor's Name
- Supplier's Name or Manufacturer's Name
- Specification Section and Paragraph Number (Product or Execution Parts)
- Contract Drawing File Number
- Transmittal Number

### 3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

#### 3.5.1 Procedures

Submittals required by the CONTRACT CLAUSES and other non-technical parts of the contract are not included in this section. The Contractor shall submit to the Contracting Officer: four (4) copies for approval, and three (3) copies for information only, of all shop drawings, certificates of compliance, materials, fixtures and equipment lists called for under the various headings of these specifications. These drawings, certificates and lists shall be complete and detailed and, prior to submission, must be reviewed and certified correct by the Contractor as required by the Quality Control System paragraph of the Construction Quality Control Section. If approved by the Contracting Officer, three (3) sets of all submittals will be returned to the Contractor. Submittals for information only usually will be returned to the Contractor. Submittals for information only usually will not be returned. The Contractor is encouraged to submit paper documents that are printed/copied double-sided on recycled paper that has at least 20% postconsumer material.

##### (a) Resubmittals

(1) If a submittal is returned for correction or is not satisfactory and is disapproved by the Contracting Officer, the Contractor shall resubmit the corrected material in the same quantity, including reproducibles as specified for the original submittal for approval within 14 days after receipt by him of the disapproved material.

#### 3.5.2 Deviations

For submittals which include proposed deviations, extensions of design and proposed changes to designs requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

### 3.6 SPARE PARTS LIST AND MAINTENANCE OPERATIONS MANUALS:

Within 30 calendar days after approval of shop drawings and equipment lists, the Contractor shall submit, to the Contracting Officer, 3 copies of spare parts lists and operating and maintenance manuals as required under the various headings of these specifications. One reproducible, unfolded copy shall be provided of all operating instructions, control diagrams, etc., that are larger than 8-1/2-inches by 11-inches; this does not apply to standard manufacturer's data.

##### (A) Spare parts lists shall contain the following listed information:

(1) Quantity of parts required for 120 days and one year of operation.

- (2) Description of each spare part.
- (3) Drawing number and shop drawing reference.
- (4) Part equipment code number.
- (5) Unit price of each item.
- (6) Total price of all items.
- (7) Procurement lead time with particular attention to long lead times.
- (8) Name and address of nearest supplier.
- (9) Such remarks and data as the manufacturer may consider.
- (10) Complete parts list of all replaceable items.

(B) Operation, Maintenance, and Repair Manuals and Instructions:

(1) The requirements for furnishing operating, maintenance, and repair data/manuals and field instructions under this contract are specified in the Technical Specifications. The Contractor shall submit to the Contracting Officer, not later than 60 calendar days after the Notice to Proceed, an outline showing the proposed submittal date(s) of operation and maintenance manuals to be furnished the Government and the scheduled date(s) of all required field instructions to be provided by the Contractor furnished personnel or manufacturer's representatives. All operation and maintenance manuals must be furnished to the Contracting Officer not later than 60 calendar days prior to turnover of the facility to the Government.

(2) Failure on the part of the Contractor to comply with requirements of this clause will result in no further payment until all required O&M data/manuals are submitted and accepted.

(3) All O&M data/manuals submittal data shall be entered in a separate section of the master submittal register.

### 3.7 AS-BUILT DRAWINGS

(A) General: The Contractor shall send to Contracting Officer one (1) full set of reproducible construction record drawings (30" x 42" cronoflex or 3 mil double matte sheets) and two (2) copies of drawings on 3 1/2" floppy diskettes, in format compatible with AutoCad, Release 12. The as-built prints shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the contract set of drawings and a record of all deviations, modifications, or changes from those drawings, however minor, which were incorporated in the work, all additional work not appearing on the contract drawings, and all changes which are made after final inspection of the contract work.

In the event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the as-built drawings, the Contractor shall furnish revised and/or additional drawings as required to depict as-built conditions. The requirements for these additional drawings will be the same as for the as-built drawings included in the original submission.

(B) Preliminary As-built Prints: The Contractor shall maintain one set of paper prints to show the as-built conditions. These as-built marked prints shall be kept current and available on the jobsite at all times. All changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. The as-built marked prints will be jointly inspected for accuracy and completeness by the Contracting Officer's representative and a responsible representative of the construction Contractor prior to submission of each monthly pay estimate. The prints shall show the following information, but not be limited there to:

- (1) The location and description of any utility lines or other installations of any kind or description known to exist within the construction area. The location includes dimensions to permanent features.
- (2) The location and dimensions of any changes within the building or structure.
- (3) Correct grade or alignment of roads, structures or utilities if any changes were made from contract plans.
- (4) Correct elevations if changes were made in site grading.
- (5) Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.
- (6) The topography and grades of all drainage installed or affected as a part of the project construction.
- (7) All changes or modifications which result from the final inspection.
- (8) Options: Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the as-built drawings.
- (9) Submittal to Contracting Officer for review and Approval: Not later than 2 weeks before acceptance of the project by the Government, the Contractor shall deliver to the Contracting Officer one (1) full set of reproducible construction record drawings (30" x 42" cronoflex or 3 mil double matte sheets) and two (2) copies of drawings on 3-1/2" floppy diskettes, in format compatible with AutoCad, Release 12 and marked-up specifications complete with amendments, to depict as-built conditions. If upon review, the drawings are found to contain errors and/or omissions, they shall be returned to the Contractor for corrections. The Contractor shall complete the corrections and return the drawings to the Contracting Officer within ten (10) calendar days. If a satisfactory set of as-built drawings are not received within the time limits defined, no further payment will be made to the Contractor until this requirement is satisfied.

### 3.8 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

### 3.9 GOVERNMENT APPROVED (GA) SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Three (3) copies of the submittal will be retained by the Contracting Officer and one (1) copy of the submittal will be returned to the Contractor.

### 3.10 FOR INFORMATION ONLY (FIO) SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

### 3.11 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements

shall be similar to the following:

<b>CONTRACTOR</b> (Firm Name)
_____ Approved
_____ Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE: _____
TITLE: _____
DATE: _____

----- End of Section -----



INSTRUCTIONS

ER 415-1-10  
15 Apr 97

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box: on resubmittals, insert transmittal number of last submission well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on I separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications-also a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, Indicate "Sample" or "Certificate" In column c, Section L
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below In space provided In Section 1, column f to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as Indicated below in Section 1, column g, to each item submitted.

B  
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THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

- |                                                                                               |                                                                                    |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| A -- Approved as submitted.                                                                   | E - Disapproved [See I tached].                                                    |
| B .. Approved, except as noted on drawings.                                                   | F - Receipt acknowledged.                                                          |
| c .. Approved, except as noted on drawings.<br>Refer to attached sheet resubmission required. | FX - Receipt acknowledged, does not comply<br>as noted with contract requirements. |
| D -- Will be returned by separate correspondence.                                             | G - Other (Specify)                                                                |

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

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#### 1.3.1.2 Protection of Features

The Contractor shall determine methods for the protection of features to be preserved within authorized work areas. The Contractor shall prepare a listing of methods to protect resources needing protection, i.e., trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archaeological and cultural resources.

#### 1.3.1.3 Procedures

The Contractor shall implement procedures to provide the required environmental protection and to comply with the applicable laws and regulations. The Contractor shall set out the procedures to be followed to correct pollution of the environment due to accident, natural causes or failure to follow the procedures set out in accordance with the Environmental Protection Plan.

#### 1.3.1.4 Permit or License

The Contractor shall obtain all needed permits or licenses. The Contractor shall coordinate all environmental permits with the Base Environmental Management Office.

#### 1.3.1.5 Drawings

The Contractor shall include drawings showing locations of any proposed temporary excavations or embankments, haul roads, drainage, stream crossings, material storage areas, structures, parking areas, equipment storage areas, sanitary facilities, stockpiles of earth materials, and disposal areas for excess earth material and unsatisfactory earth materials, and any other project related temporary disturbance. The location of all such areas will be coordinated in advance with 95 CEG/CECV (Base Planning) and AFFTC/EM (Environmental Management Office). In no case shall any location be proposed for use that is not analyzed in the environmental document.

#### 1.3.1.6 Environmental Monitoring Plans

The Contractor shall include environmental monitoring plans for the job site which incorporate land, water, air noise, and any other required or necessary monitoring.

#### 1.3.1.7 Traffic Control Plan

The Contractor shall include a traffic control plan for the job site, which shall include any mitigations identified in the Environmental Document (if applicable).

#### 1.3.1.8 Surface and Ground Water

The Contractor shall establish methods of protecting surface and ground water during construction activities.

#### 1.3.1.9 Work Area Plan

The Contractor shall include a work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. The plan shall include measures for marking the limits of use areas. The proposed work areas shall not exceed those limitations or boundaries identified in the Environmental Document prepared for this project.

#### 1.3.1.10 Plan of Borrow Area(s)

The Contractor shall include a plan of borrow area(s) for the job site. Currently, no borrow pit exists on Base for Contractor use. Proposals for borrow pit may be submitted to the Base Civil Engineer and Environmental Management Office for consideration.

#### 1.4 SUBCONTRACTORS

Assurance of compliance with this Section and all related environmental documents and procedures by subcontractors will be the responsibility of the Contractor.

#### 1.5 PERMITS OBTAINED BY THE CORPS OF ENGINEERS

The Corps of Engineers will not obtain any permits for this project. See Contract Clause entitled, "PERMITS AND RESPONSIBILITIES".

#### 1.6 REGULATORY REQUIREMENTS

The Contractor shall comply with all Federal, State, and Local regulatory and statutory requirements.

### PART 2 PRODUCTS (NOT APPLICABLE)

### PART 3 EXECUTION

#### 3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the contract drawings, specifications, and environmental documents. When conflict exists, the Environmental Document shall govern. Environmental protection shall be as stated in the following paragraphs.

##### 3.1.1 PROTECTION OF LAND RESOURCES

Prior to the beginning of any construction, the Contracting Officer's Representative will identify all land resources to be preserved within the Contractor's work area (see the Environmental Document for this identification). The Contractor shall not remove, cut, deface, injure, or destroy any environmental features including plants, insects, land features of animals outside the boundaries established in the Environmental Document prepared for this project. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, top soil, and land forms without special permission from the Contracting Officer's Representative. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following paragraphs.

###### 3.1.1.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas where no work is to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence and during all construction operations. Where construction operations are to be conducted during darkness, the markers shall be visible during darkness. The Contractor shall convey to his personnel the purpose of marking and/or protection of all necessary objects.

###### 3.1.1.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features to be preserved, indicated and defined on the drawings submitted by the Contractor as a part of the Environmental Protection Plan, shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

###### 3.1.1.3 Reduction of Exposure of Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated and specified. Side slopes and back slopes shall be protected from wind and water erosion using commonly accepted construction practices as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in instances where the constructed feature obscures borrow areas, quarries and waste material areas, these areas shall not initially be cleared in total. Clearing of such areas shall progress in reasonably sized increments as needed to use the areas developed as approved by the Contracting Officer's Representative. Terms and conditions identified in the environmental document to minimize production of airborne particle shall be incorporated into the project.

#### 3.1.1.4 Temporary Protection of Disturbed Areas

Such methods as necessary shall be utilized to effectively prevent erosion, control sedimentation, and entrainment of dust and other particulates in the wind.

#### 3.1.1.5 Location of Contractor Facilities

The Contractor's field offices, staging areas, stockpiles, storage, and temporary buildings shall be planned in areas designated on the contract drawings and approved by the Contracting Officer's Representative, and coordinated with the Base Civil Engineer and Environmental Management Office. Temporary movement or relocation of Contractor facilities shall be made only on approval by the Contracting Officer's Representative.

#### 3.1.1.6 Borrow Areas on Government Property

Currently, there are no borrow areas on Edwards Air Force Base. EAFB is receptive to proposals for borrow areas. Proposals must be coordinated with the Base Civil Engineer and the Environmental Management Office in advance of any borrow area usage.

#### 3.1.1.7 Disposal Areas on Government Property

There are no disposal sites located on Edwards Air Force Base. Contractor shall haul material to an off-Base approved disposal site.

#### 3.1.1.8 Temporary Excavation and Embankments

Temporary excavation and embankments shall be controlled to protect adjacent areas from disturbance. All temporary excavations shall meet Cal-OSHA requirements.

#### 3.1.1.9 Disposal of Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. All handling and disposal shall be conducted to prevent contamination. All disposal of solid waste shall be at a Contracting Officer's Representative approved, off Base facility. The Contractor shall provide the Contracting Officer's Representative with copies of records showing the actual weight of solid waste disposed, as measured at the disposal facility, as well as disposal facility identification.

The Contractor shall be responsible for the preparation of all manifest(s) and or other documentation, for all solid waste. For signature required by law prior to disposal, the Contracting Officer's Representative (Edwards AFB Environmental Management Office) shall sign the manifests. The Contractor shall obtain the services of a licensed and approved transporter of hazardous and/or non-hazardous material(s). The Contractor shall return copies of the completed manifests to the Environmental Management Office department within 30 days of the date of the manifest(s). All costs involved in the preparation of the hazardous or non-hazardous manifest(s) and or other documentation, removal, disposal, recycling and or other costs involved, etc., shall be the responsibility of the Contractor.

#### 3.1.1.10 Disposal of Chemical (Hazardous) Wastes

The off-Base disposal of all hazardous materials must be in accordance with all applicable laws, rules and regulations, and the Base Hazardous Materials and Hazardous Waste Disposal Plan.

Paint, Paint products, sealants, solvents, cements, asphaltic compounds, pesticides, herbicides, rodenticides, and etc., are all considered to be hazardous materials. The containers in which these materials are held, unless the container is thoroughly dried are also considered to be hazardous waste. All usable or unusable residues shall be retained by the Contractor. Thoroughly dried containers that have held hazardous materials shall be prepared for disposal at an off-site location by punching a 1/4 inch hole in the container 2 inches up from the bottom. Chemical waste (including pesticides) shall be stored in appropriate containers, in compliance with all applicable laws, rules and regulations. The waste shall be removed from the work area, to a Contracting Officer's Representative approved, off Base location and disposed of in accordance with Federal, State and Local regulations. No waste shall remain on Edwards AFB for longer than 75 days. Contractor shall maintain appropriate records and manifests of disposed quantities and locations in the event of a Federal, State and Local inspection of records. The Contractor shall be responsible for the preparation of all manifest(s) and or other documentation. The Contractor shall obtain the services of a licensed and approved transporter of hazardous and or non-hazardous material(s). The Contractor shall arrange with the transporter(s) for all manifest(s) and or other documentation, to be returned to Edward's Environmental Management Office within 30 days of the date the manifest(s). All costs involved in the preparation of the hazardous or non-hazardous manifest(s) and or other documentation, removal, disposal, recycling of wastes and or other costs involved, etc., shall be the responsibility of the Contractor.

#### 3.1.1.11 Hazardous Materials

The Contractor shall submit Material Safety Data Sheets (MSDS) on all hazardous materials (as defined by Federal, State, and Local regulations) before such materials are brought on base. The Contractor shall maintain a Hazards Communication program until the project is completed. All project personnel shall be informed of the program, and the location of the program materials.

#### 3.1.1.12 Contractor Equipment

The parking and servicing of Contractor equipment and vehicle is of concern to Base Environmental Management. Both mobile (trucks, bulldozers, and etc.) and immobile (generators, welding machines, compressors) equipment is covered by this section. The hazards of concern included those associated with the leaking or spilling of fuels, oils, greases, cleaning agents, and etc. The Contractor shall implement the following mitigations:

Impervious membranes be used to cover the ground surface where mobile and immobile equipment would be parked and/or serviced.

That all leaks be repaired immediately, or equipment be replaced as necessary, and that the equipment be kept in good repair.

All used oils, filters, etc., be removed from the site on a daily basis, and all leaks and spills be cleaned up immediately. Contractor is responsible for complying with all applicable laws regulating release of any chemicals to the environment.

All fuels, oils, lubricants and etc., stored on site be stored, dispensed, used and disposed of in accordance with all applicable Federal, State, and Local laws, rules and regulations.

It is suggested that the Contractor provide an equipment servicing truck, or a Contracting Officer's approved subcontractor for refueling, oiling, lubricating and etc. This would eliminate the need to store fuels, oils, and lubricants on Base, and the associated environmental liability.

#### 3.1.1.13 General Electrical Note

All new electrical equipment, of all types, purchased for Edwards Air Force Base projects contain no detectable PCB's.

### 3.1.2 POLLUTION PREVENTION

Contractor shall adhere to Federal, State, Local, and Base policies in regards to pollution prevention. The use of Class 1 ozone depleting substances (ODC's) during the performance of this work, or when used in equipment is discouraged. Any usage of a Class 1 ODC must be coordinated with the Contracting Officer's Representative, the Base Environmental Management Office and the Hazardous Materials Pharmacy before work is started. Contractor shall minimize the usage of hazardous materials and subsequent generation of hazardous wastes whenever possible. Contractor shall maintain an inventory of hazardous materials brought on Base, and shall provide a copy of this inventory to the Contracting Officer's Representative. Contractor shall employ source reduction techniques whenever possible to minimize wastes. Contractor shall maximize the usage of materials containing recycled contents in accordance with affirmative procurement policies. Contractor is encouraged to use recycling whenever possible. Contractor is encouraged to demonstrate conservation of energy and natural resources.

Should "PCB" ballast(s) be encountered on this project, and, in order to protect Edwards AFB, known as the generator, from liability, now or in the future the Contractor shall: a) Recycle PCB contaminated ballast(s); b) Not dispose of any part of the ballast(s) containing "PCB's" in any Local, State, or Federal approved landfill.

There are currently no known facilities authorized to accept "PCB" contaminated ballast's for "Recycling" within the State of California. All ballast's capacitors and other "PCB" contaminated material shall be disassembled at a State or Federally approved facility and shall be incinerated at a State or Federally approved facility. Incineration of all "PCB" contaminated material shall be in accordance with State and or Federal environmental requirements, 99.9999% destruction, and shall be so noted, on the manifest or other documentation that is returned to the Edward's Air Force Base AFFTC/EM department. Notation of the recycling of all other parts of the non-contaminated remaining metal portions of the ballast(s) recycled in a State or Federal environmentally approved facility, and the manner of the recycling shall be noted on the manifest or other documentation that is returned to Edward's AFB AFFTC/EM department. Should non-contaminated ballast(s) be encountered on this project, the Contractor shall recycle the ballast(s) in accordance with all Federal, State, local, and Air Force approved methods in an approved facility and in accordance with all approved environmental regulations..

Should fluorescent tubes, and or HID lamps be encountered on this project, it is recommended, that the Contractor not dispose of fluorescent tubes and or HID lamps that have been identified as containing Mercury, in any Federal, State, or Local landfill. Recycling of fluorescent tube, and HID lamps, that have been identified as containing Mercury, in order to reclaim the Mercury,

Glass and other Metal Parts, shall be accomplished, by a State or Federal approved recycler, in accordance with State and/or Federal environmentally approved methods. There are State and/or Federal approved facilities for the recycling of fluorescent tubes and HID lamps containing Mercury located in the State of California. Notification of the State or Federal approved recycler shall be noted on the manifest, or other documentation, which is to be returned to Edward's AFB AFFTC/EM department.

### 3.2 HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

#### 3.2.1 There may be cultural resources in or near the work area

All work of a ground disturbing nature will be confined to those areas designated for the project. Environmental documentation shall be carefully reviewed for any special directions or restrictions related to cultural resource protection, and all mitigations identified in the environmental document shall be incorporated into the project.

#### 3.2.2 Known cultural resources within or adjacent to the Contractor's work area will be so designated by

the Contracting Officer's Representative

Precautions shall be taken by the Contractor to avoid and preserve all such resources as they existed at the time they were pointed out to the Contractor. The Contractor shall depict the location of these resources of the contract drawings and shall assume responsibility for their protection during the contract. Cultural resource location information is protected and shall be disseminated only on a need-to-know basis.

3.2.3 All contract personal shall be instructed not to collect any artifact or specimen or trespass into areas designated as cultural resources.

3.2.4 During construction, if any items of an apparent archaeological or historic interest (i.e. arrowheads, old bottles, etc.) are discovered, they shall be left undisturbed and the Contractor shall report the find immediately to the Contracting Officer's Representative. The Contracting Officer's Representative shall then immediately notify the Base Historic Preservation Officer of the find so that it may be evaluated.

### 3.3 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control, to minimize interference, disturbance, or damage to fish and wildlife. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations.

#### 3.3.1 Wildlife Encounters During Construction

It is not anticipated that there will be an abundance of wildlife encounters at the project site. However, should the Contractor discover animals, bats or nesting birds living within the construction boundaries, operations shall be suspended at the site of discovery and continued in other areas. The Contractor shall notify the Contracting Officer's Representative immediately of the findings, including a brief statement of the location.

#### 3.3.2 Desert Tortoise

Contractors shall follow all terms and conditions identified in the "Biological Opinion for Routine Operations and Facility Construction within the Cantonment Areas of Main and South Base, Edwards AFB, CA (1-6-91-F-28)", dated 4Dec91, or the applicable biological opinion for this project. The applicable biological opinion will be included in the environmental document.

The Contractor shall follow all terms and conditions and mitigations identified in the Biological Opinion that is applicable to this project. Contractor employees shall not touch, harm, harass, or kill desert tortoises. The Contracting Officer's Representative shall be notified immediately of all desert tortoise sightings. Should construction activities threaten the survival of any desert tortoises, those activities will immediately cease.

##### 3.3.2.1 Environmental Awareness

The Contractor shall implement an employee's environmental awareness program which will be provided to construction and operation employees with information to encourage awareness and preservation of the desert ecosystem and the resources found in the Western Mojave Desert. This information shall be distributed to and discussed with all employees during employee orientation sessions. This information shall be provided to all visitors and subcontractors that will be on-site. The Contractor shall have all persons participating in the environmental awareness program sign a statement declaring that the individual understands and will adhere to the guidelines set forth in the program material.

##### 3.3.2.2 Trash and Litter Control

The Contractor shall develop a strict trash and litter control program. A litter control program shall consist of supplying an adequate number of covered trash and litter receptacles in all appropriate locations. All

containers shall be raven-proof, and all aspects of the litter control program will discourage the scavenging of litter by ravens, in addition to providing receptacles for trash generated on-site.

### 3.4 NOISE CONTROL

Contractor shall follow all terms and conditions regarding noise control identified in the Environmental Document. All operations shall be conducted to minimize impacts to residents, workers and wildlife in the area. All noise-generating devices shall be equipped with silencers and mufflers, and any other devices required to minimize noise and dust.

### 3.5 PROTECTION OF AIR RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize air emissions and protect air resources. All activities, equipment, processes, and work managed or performed by the Contractor in accomplishing the specified construction shall be in strict accordance with California Air Resources Board (CARB) criteria, and all Federal laws and regulations governing Air Quality issues including emissions, permitting and performance laws and standards. In addition, all applicable Air Pollution Control District Rules and Regulations shall be adhered to. All requirements of the mentioned rules and regulations as well as the Special Management techniques as set out below shall be implemented to control air pollution by the construction activities which are included in the contract.

#### 3.5.1 Particulate Matter

Dust particles, aerosols, and gaseous by-products from all construction activities, processing and preparation of materials, such as from asphaltic batch plants, shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and all other work areas within or outside the project boundaries free from particulates which would cause the air pollution standards mentioned in the paragraph **"PROTECTION OF AIR RESOURCES"** to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type (Contractor must submit and the Contracting Officer's Representative approves the Material Safety Data Sheets), light bituminous treatment, baghouse, scrubbers, electrostatic precipitators or other methods will be used as required to control particulates in the work area. Sprinkling, to be repeated at such intervals as to keep the disturbed area damp at all times. The Contractor must have sufficient competent equipment and personnel available to accomplish this task. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs or is potential to occur.

#### 3.5.2 Other Criteria Pollutants: Hydrocarbons, Carbon Monoxide, Nitrogen Oxides, Sulfur Oxides, lead and others

All identified Emissions generated from equipment of process shall be controlled per applicable Federal, State, and Local rules and regulations. All permitted devices shall be operated per the identified limitations. Best Available Control Technology (BACT) and/or Reasonably Available Control Technology (RACT) shall be employed as required.

#### 3.5.3 Hazardous Air Pollutants

All Federal and State regulated hazardous air pollutants shall be controlled and monitored as required by applicable laws and regulations. Permitted devices and processes shall be operated per the identified limitations.

#### 3.5.4 Odors

Odors shall be controlled at all times for all construction activities, processing and preparation of materials.

#### 3.5.5 Monitoring Air Quality

Monitoring of air quality shall be the responsibility of the Contractor. All air areas affected by the construction activities shall be monitored by the Contractor.

### 3.5.6 Internal Combustion Engines

Kern County APCD, Rule 202, requires a permit on all internal combustion engines over 50BHP not connected to a transmission. No permit is needed if the equipment shall be removed from EAFB in 45 days or less. These engines include, but not limited to: Generators, compressors, and welding machines. If the equipment shall remain on-base for longer than 45 days, a permit from the APCD will be required. The permit shall remain on base as long as the equipment remains, and the Contractor shall produce the permit when requested to do so. For further information, contact AFFTC/EM at (805) 277-1401.

## 3.6 PROTECTION OF JOSHUA TREES

### 3.6.1 Joshua Trees Within Project Site

Due to the limited vegetation in the area, removal or relocation of plants shall be minimized. The Contractor shall obtain approval from the Contracting Officer's Representative before removing or relocating any plants within the construction boundaries. Joshua trees shall be protected to the extent possible and coordination made with the Contracting Officer's Representative before moving or relocating this species. Procedures for relocating those within the project site are described as follows:

### 3.6.2 Joshua Trees

Only trees under five (5) feet tall shall be moved using hand tools. Mark north side of the tree and plant in same orientation. Using shovel, dig down to get main root mass (generally within two (2) feet of surface). Try to get tap root and a fibrous water storage structure that it leads to. Take some of the top soil to put in new hole. Roots should be dusted with sulfur to prevent rot. A small amount of manure can be mixed in soil when replanting. Soil should be tamped down and a small berm placed around plant 5-foot diameter. Water with several gallons. Stake in two (2) directions to prevent wind from knocking it down. If not transplanted right away, "heel in" plant (lay then on their side and cover roots with soil). Larger Joshua Trees (5-20 feet tall) shall not be moved but be detoured around by the utilities. If plants need relocation areas, they can be used in landscaping around the base.

## 3.7 COMPLIANCE LOG

The Contractor shall establish and maintain quality control for environmental protection operations to assure compliance with contract requirements and maintain records of his quality control for all construction operations, including, but not limited to the following items. The Contractor shall record on daily reports any problems in complying with laws, regulations, and ordinances and corrective action taken. Three copies of these records and tests, as well as the records of corrective action taken, shall be furnished the Government at the end of the project as directed by the Contracting Officer's Representative.

### 3.7.1 Laws, Regulations, and Ordinances

The Contractor must comply with all Federal, State, and local laws, regulations and ordinances concerning pollution control. This includes submitting a Hazardous Materials and Hazardous Waste Management Plan for Edwards Air Force Base.

### 3.7.2 Protection of Land Resources

The Contractor shall prevent landscape defacement and provide post-construction clean-up.

### 3.7.3 Protection of Water Resources

The Contractor shall prevent the contamination of lakes, ditches, or other bodies of water with harmful

chemicals; the Contractor shall dispose of waste materials to an approved off-base disposal site; and the Contractor shall provide erosion control.

#### 3.7.4 Pollution Control Facilities

The Contractor shall provide for the maintenance of pollution control facilities, and conduct a training course on the maintenance of pollution control facilities.

### 3.8 INSPECTION

The Contracting Officer's Representative will notify the Contractor in writing of any observed noncompliance with the Contractor's Environmental Protection Plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer's Representative of proposed corrective action and take such action as may be approved. If the Contractor fails to comply promptly, the Contracting Officer's Representative may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

### 3.9 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all area(s) used for construction.

### 3.10 RESTORATION OF LANDSCAPE DAMAGE

The Contractor shall restore all landscape features damaged or destroyed during construction operations to original conditions, including removal of all debris, trash, and rubbish. Revegetate disturbed desert areas. Such restoration shall be in accordance with the plans submitted for approval to the Contracting Officer's Representative, and shall include an AFFTC/EM approved revegetation plan. To minimize restoration the Contractor is encouraged to minimize disturbing desert areas.

### 3.11 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain all constructed facilities and temporary pollution control devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

### 3.12 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL

The Contractor shall train his personnel in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities (vegetative covers and instruments required for monitoring purposes) to insure adequate and continuous environmental pollution control.

-----End of Section-----

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## SECTION 01430(FI)

### ENVIRONMENTAL PROTECTION

#### 1. GENERAL

##### 1.1 DEFINITIONS

For the purpose of this specification environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic and recreational purposes. The control of environment pollution requires consideration of air, water, and land, and involves noise, solid waste-management and management of radiant energy and radioactive materials, as well as other pollutants.

#### 2. APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

U. S. Army, Corps of Engineers Publication:  
EM 385-1-1 Safety and Health Requirements Manual (1 Oct 1992)

#### 3. APPLICABLE REGULATIONS

In order to prevent, and to provide for abatement and control of, any environmental pollution arising from the construction activities of the Contractor and his subcontractor in the performance of this contract, they shall comply with all applicable Federal, State, and local laws, and regulations concerning environmental pollution control and abatement, and all applicable provisions of the Corps of Engineers Manual, EM 385-1-1, entitled "Safety and elsewhere in the contract specifications.

##### (a) Environmental compliance and monitoring

All construction activity is subject to Federal Environmental laws including, but not limited to: the National Environmental Policy Act (NEPA); The National Historic Preservation Act (NHPA); Endangered Species Act; Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response Liability and Compensation Act (CERCLA); Clean Water Act (CWA); Clean Air Act (CAA); Safe Drinking Water Act (SDWA), and applicable state, regional, and local equivalents. The Contractor is responsible for compliance with these laws.

#### 4. NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any non-compliance with the foregoing provisions and the action to be taken. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it was determined that the Contractor was in compliance in accordance with FAR 52.212-12, see Section 00700.

#### 5. SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

#### 6. IMPLEMENTATION

Prior to commencement of the work the Contractor will:

(A) Submit in writing his proposals for implementing this section for environmental pollution control;

(B) Meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with this provision and administration of the environmental pollution control program.

## 7. PROTECTION OF LAND RESOURCES

It is intended that the land resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their present condition or be restored to a condition after completion of construction that will appear to be natural and not detract from the appearance of the project. Insofar as possible, the Contractor shall confine his construction activities to areas defined by the plans or specifications. Contractor's attention is directed to the requirements of paragraph, PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS; paragraph, OPERATIONS AND STORAGE AREAS; and paragraph, CLEANING UP, of the CONTRACT CLAUSES, Section 00700.

## 8. ARCHAEOLOGICAL FINDINGS DURING CONSTRUCTION

There are no known archaeological remains at the project site. Should any skeletons, artifacts, or other archaeological remains be uncovered, the Contractor shall suspend operations at the site of discovery and continue operations in other areas. The Contractor shall notify the Project Engineer immediately of the findings. Included with the notification shall be a brief statement to the Contracting Officer of the location and the findings. Should the discovery site require archaeological studies resulting in delays and/or additional work, the Contractor will be compensated by an adjustment under the CONTRACT CLAUSES, Section 00700, of the contract.

## 9. BURNING RUBBISH AND DEBRIS

Open burning of rubbish, debris and other combustibles will not be permitted on the Post.

## 10. DUST CONTROL

The Contractor shall provide an acceptable plan for preventing the generation of dust due to his operation in construction zones, along haul routes, in equipment parking areas, and in waste areas. This plan may consist of water sprinkling or an equivalent service.

## 11 PROTECTION OF WILDLIFE

(A) Wild Life Encounters During Construction:

It is not anticipated that there will be an abundance of wildlife encounters at the project site. However, should the Contractor discover animals, bats or nesting birds living within the construction boundaries, operation shall be suspended at the site of discovery and continued in other areas. The Contractor shall notify the Contracting Officer immediately of the finding. Included with the notification shall be a brief statement to the Contracting Officer of the location and the findings. How to identify sensitive animals that may be discovered will be provided at the Preconstruction Conference.

(B) Desert Tortoise:

Contractor employees shall not touch, harm, harass, or kill desert tortoises. The Biological Monitor shall be notified immediately of all desert tortoise sightings. The Biological Monitor will be responsible for removing desert tortoises out of immediate dangers. Should construction activities threaten the survival of any desert tortoises, those activities will immediately cease until the Biological Monitor safely removes the tortoise(s). The Biological Monitor shall perform clearance surveys in all areas of planned disturbance. The Biological Monitor will be available to accompany construction crews during period of tortoise activity to provide protection of these animals and their burrows.

(1) The Contractor shall implement an employees environmental awareness program which will be provided to construction and operation employees with information to encourage awareness and preservation of the desert ecosystem and the resources found in the **Western Mojave Desert**. This information shall be distributed to and discussed with all employees during employee orientation sessions. This information shall also be provided to all visitors and subcontractors that will be on-site. The Contractor shall have all persons participating in the environmental awareness program sign and affidavit declaring that the individual understands and will adhere to the guidelines set forth in the program material.

(2) The Contractor shall develop a strict trash and litter control program. A litter control program shall consist of supplying an adequate number of covered trash and litter receptacles in all appropriate locations.

## 12. PROTECTION OF ENDANGERED TREES

### (A) Endangered Trees within Project Site:

Due to the limited vegetation in the area, removal or relocation of plants shall be minimized. The Contractor shall obtain approval from the Contracting Officer before removing or relocating any plants within the construction boundaries. Joshua Trees shall be protected to the extent possible and coordination made with the Contracting Officer before moving or relocating this species. Procedures for relocating those within the project site are described as follows:

### (B) Joshua Trees:

Only trees under five (5) feet tall shall be moved using hand tools. Mark North side of the tree and plant in same orientation. Using shovel, dig down to get main root mass (generally within two (2) feet of surface). Try to get tap root and a fibrous water storage structure that it leads to. Take some of the top soil to put in new hole. Roots should be dusted with sulfur to prevent rot. A small amount of manure can be mixed in soil when replanting. Soil should be tamped down and a small berm placed around plant 5-foot diameter. Water with several gallons. Stake in two (2) directions to prevent wind from knocking it down. If not transplanted right away, "heel in" plant (lay then on their side and cover roots with soil). Larger Joshua Trees (5-20 feet tall) shall not be moved but be detoured around by the utilities. If plants need relocation areas, they can be used in landscaping around the post.

## 13. MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT PERMITS

### (A) Paint and coating permit:

Paint and coating spray application equipment requires a written permit to operate from the Mojave Desert Air Quality Management District (MDAQMD). Contractor is responsible for adhering to all applicable federal, state, and local authorities.

### (B) Sand blasting permit:

Sandblasting equipment requires a permit from MDAQMD and it is the contractor's responsibility to follow all federal, state, and local regulations that pertain to the project.

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## SECTION 01430(GEN)

### ENVIRONMENTAL PROTECTION

#### 1. GENERAL

##### 1.1 DEFINITIONS

For the purpose of this specification environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic and recreational purposes. The control of environment pollution requires consideration of air, water, and land, and involves noise, solid waste-management and management of radiant energy and radioactive materials, as well as other pollutants.

#### 2. APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

U. S. Army, Corps of Engineers Publication:  
EM 385-1-1                      Safety and Health Requirements Manual  
(1 Oct 1992)

#### 3. APPLICABLE REGULATIONS

In order to prevent, and to provide for abatement and control of, any environmental pollution arising from the construction activities of the Contractor and his subcontractor in the performance of this contract, they shall comply with all applicable Federal, State, and local laws, and regulations concerning environmental pollution control and abatement, all applicable provisions of the Corps of Engineers Manual, EM 385-1-1, and elsewhere in the contract specifications.

(A) Environmental compliance and monitoring.

(1) General:

All construction activity performed are subject to federal environmental laws including, but not limited to: The National Environmental Policy Act (NEPA); The National Historic Preservation Act (NHPA); Endangered Species Act; Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response Liability and Compensation Act (CERLCA); Clean Water Act (CWA); Clean Air Act (CAA); Safe Drinking Water Act (SDWA), and applicable state, regional, and local equivalents. The Contractor is responsible for compliance with these laws. The Environmental Management Office, 30 SPW/ET, is the single point of contact with regulatory agencies for any construction at Vandenberg AFB.

(2) Santa Barbara County:

The Contractor shall comply with all Santa Barbara County Air Pollution Control District (APCD) rules and regulations for construction within that county. These include, but are not limited to, the following:

(a) All demolition, site clearing, rough grading, landscape grading, excavation, backfilling, and trenching shall comply with APCD Rules 210, 302, 303, 304, and 306.

(b) All coating/painting operations shall comply with APCD Rules 102FF, 201, 317, 322, 323, 330, 337, and 339.

(c) All construction of new or modified air-conditioning systems shall comply with APCD Rule 335.

(d) All operations with solvents shall comply with APCD Rule 317 and 324.

(e) All sandblasting/corrosion control operations shall comply with California Administrative Code, Title 17, Register 84, No. 35, Sections 92000 through 92540, and shall comply with APCD Rules 303, 304, 306, 205.C.3.b.1, 901, and 1001. All sandblasting equipment must be permitted with a valid Permit to Operate (PTO) from the APCD. Only abrasives which are certified for use in sandblasting operations by the California Air Resources Board (CARB) Advisory may be used.

(3) Hazardous materials:

(a) The Contractor shall be responsible for the removal, storage, transportation, and disposal of all hazardous waste (Title 22, CCR) and designated waste (Title 23, CCR) in accordance with applicable federal, state, and local regulations. Copies of all analyses and manifests shall be given to the government inspector at the time of removal from the site and after the disposal facility accepts and signs for the waste. Hazardous waste manifests will be signed only by an appropriate county official. Suspected hazardous materials encountered during excavation and construction will require immediate notification of the Contracting Officer's Representative for examination, possible sampling, and guidance for management. If hazardous or designated waste is identified after award, a negotiated equitable adjustment will be made to the contract.

(b) Any electrical equipment removed, maintained or repaired as part of this Contract shall be tested for polychlorinated biphenyls (PCBs), a regulated hazardous waste. Testing and laboratory analyses shall be paid for by the Contractor. Testing, removal, storage, transportation and disposal of this material shall follow federal, and state guidelines. This may include but is not limited to the following: 40 CFR 761 (Federal); Title 22 CCR (California).

(c) When removing any underground storage tanks, the Contractor may be required to obtain an "Application for Permit to Remove" from the Santa Barbara County Health Care Service.

#### 4. NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any non-compliance with the foregoing provisions and the action to be taken. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it was determined that the Contractor was in compliance in accordance with FAR 52.212-12, see Section 00700.

#### 5. SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

#### 6. IMPLEMENTATION

Prior to commencement of the work the Contractor will:

(A) Submit in writing his proposals for implementing this section for environmental pollution control;

(B) Meet with representatives of the Contracting Officer to develop mutual understandings relative

to compliance with this provision and administration of the environmental pollution control program.

## 7. PROTECTION OF LAND RESOURCES

It is intended that the land resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their present condition or be restored to a condition after completion of construction that will appear to be natural and not detract from the appearance of the project. Insofar as possible, the Contractor shall confine his construction activities to areas defined by the plans or specifications. Contractor's attention is directed to the requirements of paragraph, PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS; paragraph, OPERATIONS AND STORAGE AREAS; and paragraph, CLEANING UP, of the CONTRACT CLAUSES, Section 00700.

(A) It is intended that the natural and cultural resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their present condition or be restored to pre-construction conditions. The Contractor shall confine project-related activities to areas defined by the plans or specifications. The Contractor shall mark the construction limits using 36-inch stakes placed no further than 25 feet apart. These stakes must remain in place for the duration of the project. After staking, the construction limits will be inspected and must be approved by Contracting Officer's Representative. The Contractor shall brief all employees and subcontractors on the purpose of the stakes. Any encroachment outside the staked area may result in project delays and increased environmental costs for which the Contractor shall be liable.

## 8. ARCHAEOLOGICAL FINDINGS DURING CONSTRUCTION

There are no known archaeological remains at the project site. Should any skeletons, artifacts, or other archaeological remains be uncovered, the Contractor shall suspend operations at the site of discovery and continue operations in other areas. The Contractor shall notify the Contracting Officer's Representative immediately of the findings. Included with the notification shall be a brief statement to the Contracting Officer of the location and the findings. Should the discovery site require archaeological studies resulting in delays and/or additional work, the Contractor will be compensated by an adjustment under the CONTRACT CLAUSES, Section 00700, of the contract.

## 9. BURNING RUBBISH AND DEBRIS

Open burning of rubbish, debris and other combustibles will not be permitted on the facility.

## 10. DUST CONTROL

The Contractor shall provide an acceptable plan for preventing the generation of dust due to his operation in construction zones, along haul routes, in equipment parking areas, and in waste areas. This plan may consist of water sprinkling or an equivalent service.

## 11. NOISE POLLUTION

The Contractor shall maintain all noise levels within the following limits and regulations:

(A) All vehicles shall have operational noise suppression systems (e.g. mufflers).

(B) Noise levels shall comply with OSHA Standards for the State Model Community Noise Control Ordinance.

(C) Construction operations which generate excessive noise levels shall be prohibited between the hours of 7:00 P.M. and 7:00 A.M. without prior approval by the Contracting Officer.

## 12. EMISSION CONTROL

The Contractor shall see that all his vehicles and stationary piston-engine-powered equipment have emission control systems in conformance with Federal, State, and local regulations, as specified in 40 CFR 60 and 40 CFR 85-86 (and later amendments); in the California Administrative Code, Title 17, Part III, and Title 13, Chapter 3 (and later amendments); and in the rules and regulations of the Santa Barbara County Air Pollution Control District/South Coast Air Quality Management District (SCAQMD)(whichever one is applicable). These emission control systems shall be operational and well maintained at all times. In addition, transfer and storage systems that carry or contain volatile liquids or solids or that generate particulates shall be constructed and operated to minimize escape of vapors and particulates and shall comply in this regard with regulations of the U.S. Environmental Protection Agency, the State of California, Santa Barbara County Air Pollution Control District/South Coast Air Quality Management District (SCAQMD)(whichever one is applicable).

## 13. MAINTENANCE OF POLLUTION CONTROL FACILITIES DURING CONSTRUCTION

During the construction period the Contractor shall conduct adequate training courses for his supervisory maintenance personnel (down to and including foreman) including initial instructions of at least 30 minutes and continuing instructions at appropriate times but in no case less than 30 minutes per month. The curriculum shall include but not be limited to the following topics:

- (A) Methods of detection and avoiding pollution;
- (B) Familiarity with environmental standards both statutory and contractual;
- (C) Installation and care of vegetation covers, plants, and other facilities to prevent and correct environmental pollution.
- (D) Instruction in the recognition of archaeological resources.

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## SECTION 01440

### CONTRACTOR QUALITY CONTROL

#### PART 1 GENERAL

##### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

#### AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 329 (1993b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

#### PART 2 PRODUCTS (Not Applicable)

#### PART 3 EXECUTION

##### 3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause entitled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

##### 3.2 QUALITY CONTROL PLAN

###### 3.2.1 General

In addition to any Quality Control documents that are required as a part of the proposal submission documents specified elsewhere, the Contractor shall furnish for review by the Government, not later than 15 days after receipt of Notice of Award, the Contractor's Corporate Quality Control (CCQC) Plan proposed to implement the requirements of the Contract Clause entitled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, test, records, and forms to be used for Task Orders. Construction will be permitted to begin only after approval of the CCQC Plan. Construction on specific Task Orders will be permitted to begin on each Task Order only after approval of the task order specific Contractor Quality Control (CQC) Plan.

###### 3.2.2 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the corporate officer assigned responsibility for Quality Control.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters will also be furnished to the Government.

d. Corporate Policy for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents.

e. Corporate Policy for control, verification, and acceptance testing procedures for tests which may be required by the individual task orders.

f. Corporate Policy for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Corporate Policy for tracking construction deficiencies from identification through acceptable corrective action, including verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. Corporate Policy for listing of definable features of work to include a definition of definable features. The listing of definable features of work will be agreed upon during the coordination meeting of each task order.

### 3.2.3 Acceptance of Plan

Show Corporate Policy for the acceptance of the CQC Plan and revisions thereto necessary to assure satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

### 3.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

### 3.2.5 Project Specific CQC Plans

Project specific CQC plans shall be a requirement of each Task Order.

## 3.3 COORDINATION MEETING

State Corporate Policy showing an understanding of the CQC Coordination Meeting to include system details, forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, meeting minutes and the interrelationship of Contractor's Management and control with the Government's Quality Assurance.

## 3.4 QUALITY CONTROL ORGANIZATION

### 3.4.1 General

State Corporate Policy concerning the QC Organization to include the CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. Discuss the Contractor's CQC organization to include on site control, authority to take any action necessary to ensure compliance with the contract.

### 3.4.2 CQC System Manager

The Contractor shall identify the Corporate CQC System Manager (CCQCSM), an individual within his organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CCQC System Manager shall knowledgeable of construction techniques and problems. This CCQC System Manager shall be available at all times during construction and will be employed by the prime Contractor.

### 3.4.3 Additional Requirement

In addition to the above, the CCQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors" within 90 days of the contract award. This course is periodically offered quarterly by the Los Angeles District, contact the Contracting Officer or the Construction Support Section (Phil Strayhorn at 213-452-3374) for more information.

### 3.4.4 Organizational Changes

Corporate Policy concerning staffing the CQC organization to include the necessity to make changes to the CQC staff.

## 3.5 SUBMITTALS

Corporate Policy concerning submittals.

## 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. Demonstrate corporate commitment to the three phases of control which shall be conducted by the CQC System Manager for each definable feature of work.

## 3.7 TESTS

### 3.7.1 Testing Procedure

State Corporate Policy on Testing as it applies to construction to be accomplished under the various task orders.

Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government.

### 3.7.2 Testing Laboratories

#### 3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

#### 3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

### 3.7.3 On-Site Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

#### 3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials will be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Commercial Laboratory as identified by the Corps of Engineers Contracting Officer for each Task Order.

Coordination for each specific test, exact delivery location, and dates will be made through the Contracting Officer. The Contractor shall only submit those samples which are specifically designated to be sent to the Corps of Engineers designated testing laboratory. Notify the Contracting Officer's Representative at least 14 days prior to delivery of samples.

#### 3.8 COMPLETION INSPECTION

Show Corporate policy concerning completion inspection of each task order.

#### 3.9 DOCUMENTATION

State the Corporate policy on maintaining current records providing factual evidence that required quality control activities and/or tests have been performed to include subcontractors and suppliers. Discuss documentation in the following areas:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications / drawings requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications / drawings requirements.
- f. Submittals reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and / or specifications.
- j. Contractor's verification statement.
- k. Daily QC reports

##### 3.9.1 IMPLEMENTATION OF GOVERNMENTS RESIDENT MANAGEMENT SYSTEM (RMS):

The Contractor shall utilize a Government furnished CQC Daily Report Form or a Government-furnished

CQC Program Module (A computerized executable file which is DOS based and operates on a minimum 80386 IBM-compatible computers). The Program Module, if specified by the individual task order, includes a Daily CQC Reporting System form which must be used. If not specified, the CQC Daily Report Form provided by the Government is required. This form may be in addition to other Contractor desired reporting forms. However, all other such reporting forms shall be consolidated into this one Government furnished Daily CQC Report form. If the Program Module is not specified, the Contractor will also be required to complete Government-Furnished Input Forms which lists, but is not limited to, Prime Contractor staffing; letter codes; planned cumulative progress earnings; subcontractor information showing trade, name, address, and insurance expiration dates; definable features of work; pay activity and activity information; required Quality Control tests tied to individual activities; planned User Schooling tied to specific specification paragraphs and Contractors activities; and submittal information relating to specification section, description, activity number, review period and expected procurement period. The sum of all activity values shall equal the contract amount, and all Bid Items shall be separately identified, in accordance with the PRICING SCHEDULE. These forms shall be completed to the satisfaction of the Contracting Officer prior to any contract payment (except for Bonds, Insurance and/or Mobilization, as approved by the Contracting Officer) and shall be updated as required. If the Program Module is specified, the same information will be required to be submitted in electronic format to the Contracting Officer. The required information must be completed to the satisfaction of the Contracting Officer prior to any contract payment.

a. During the course of the contract, the Contractor will receive various Quality Assurance comments from the Government that will reflect corrections needed to Contractor activities or reflect outstanding or future items needing the attention of the Contractor. The Contractor will acknowledge receipt of these comments by specific number reference on his Daily CQC Report and will also reflect on his Daily CQC Report when these items are specifically completed or corrected so as to allow Government verification.

b. The Contractor's scheduling system shall include, as specific and separate activities, all Preparatory Phase Meetings (inspections); all O&M Manuals; and all Test Plans of Electrical and Mechanical Equipment or Systems that require validation testing or instructions to Government Representatives.

c. Payments will be processed using the Resident Management System.

### 3.10 NOTIFICATION OF NONCOMPLIANCE

Discuss the need for the Contracting Officer to notify the Contractor of any detected noncompliance with the foregoing requirements and the action to be taken to remedy the non-compliances.

### 3.11 CONSTRUCTION CONTROL MANUAL

In addition to the requirements specified in the various Technical Specifications hereinafter, test procedures and minimum number of tests will be performed in accordance with SPK PAM 415-1-2, "Construction Control Manual". Neither the specified minimum number of tests nor the lack of them shall in any way limit or relieve the Contractor of his responsibility to perform adequate tests to assure compliance with the quality requirements of these specifications. The referenced standards listed in this Construction Control Manual shall be of the latest issue otherwise specified.

The "Construction Control Manual" may be examined in the following office locations, and will be furnished to the Contractor:

Corps of Engineers  
Los Angeles District  
Construction Management Section  
300 N. Los Angeles St., Rm 6101  
Los Angeles, California

Corps of Engineers  
High Desert Area Office  
352 E. Ave., K-4  
Lancaster, California

-- End of Section --



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## GENERAL CONDITIONS

### 1.1 GENERAL REQUIREMENTS

The requirements of this section will be applicable for each Task Order (T. O.).

#### 1.1.1 Site Plan

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

#### 1.1.2 Identification of Employees

The Contractor shall be responsible for furnishing to each employee and for requiring each employee engaged on the work to display identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works. For projects within the confines of the Bureau of Prisons Facilities, employees must be U.S. citizens and submit to a background check thru the NCIC. Other secured facilities will have similar requirements.

#### 1.1.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements of the government/military installation. On projects involving non-government/non-military facilities, parking will be as permitted within the ordinances of the community.

### 1.2 AVAILABILITY AND USE OF UTILITY SERVICES

#### 1.2.1 Military Facilities

##### 1.2.1.1 Payment for Utility Services

The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies at no charge, except communications. The Contractor shall carefully conserve any utilities furnished without charge.

##### 1.2.1.2 Meters and Temporary Connections

The Contractor, at its expense, in accordance with applicable codes and in a manner satisfactory to the Contracting Officer, shall provide and maintain necessary temporary connections, distribution lines, and meter bases (Government will provide meters) required to measure the amount of each utility used. The Contractor shall notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired so that the service provider can verify compliance with codes and approve final connections. Under no circumstance shall the Contractor make the final electrical connection until approved by the Contracting Officer.

Page 1

##### 1.2.1.3 Sanitation

The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer. Government toilet facilities will not be available to Contractor's personnel.

##### 1.2.1.4 Telephone

The Contractor shall make arrangements and pay all costs for telephone facilities desired.

### 1.2.2 Non-Military Facilities

1.2.2.1 Contractor will make all utility arrangements with the local utilities. All costs will be the responsibility of the Contractor.

### 1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

#### 1.3.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract or otherwise provided by the Contracting Officer, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer's Representative. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

#### 1.3.2 Project and Safety Signs

(a) General:

The Contractor shall construct and erect one project sign, one safety sign and a minimum of two (2) hard hat signs at locations designated by the Contracting Officer. The signs shall conform to the requirements of the drawings attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of commencement of work under this contract. The date required by the safety sign shall be corrected daily.

(b) Materials:

(1) Lumber shall conform to DOC PS 20 and grading rules of applicable grading agencies, WCLIB or WWPA. Grade shall be "Standard" or better Douglas Fir, S4S and shall be stamped S-Dry.

(2) Plywood: Plywood shall conform to DOC PS 1, Grade AC, Group 1, Exterior.

(3) Bolts, Nuts and Nails: Bolts shall be galvanized and conform to Industry Standards. Nuts shall conform to industry standards.

(4) Type of paint for primer, finish coats, lettering and color of signs and lettering shall be indicated below. Safety signs shall be painted the same colors as the project sign. Hard hat signs shall be painted as indicated on the attached drawing.

(a) Primer as indicated on Standard Drawing.

(b) Air Force Projects: Finish coats: Background shall be Decatron (Glidden) English Tudor with Spectratone white lettering or computer generated white vinyl letters.

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(c) Army, Marine and Other Projects: Background shall be exterior white with black lettering.

(c) Construction:

(1) Signs shall be constructed as detailed on attached drawings.

(2) Painting: All exposed surfaces and edges of plywood shall be given one coat of linseed oil and be wiped prior to applying primer. All exposed surfaces of signs and supports shall be given one coat of primer and one finish coat of paint colors as indicated above. All lettering shall be sized as indicated. Width of letter stroke shall be 1/6 of the letter height, except as noted.

(d) Maintenance and Disposal:

The Contractor shall maintain the signs in good condition throughout the life of the project. Signs shall remain the property of the Contractor and upon completion of the project, removed from the site.

#### 1.4 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer's Representative. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

##### 1.4.1 Haul Roads

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer's Representative. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer's Representative shall be removed.

##### 1.4.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

#### 1.5 CONTRACTOR'S TEMPORARY FACILITIES

##### 1.5.1 Administrative Field Offices

As required by the Task Order the Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

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##### 1.5.2 Storage Area

The Contractor shall construct a temporary 1.8 meter (6 foot) high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer's Representative away from the vicinity of the construction site but within the military boundaries. Trailers, equipment, or materials shall not be open to public view with the exception of those items which are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. At the end of each work day mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment, shall be parked within the fenced area.

##### 1.5.3 Supplemental Storage Area

Upon Contractor's request, the Contracting Officer's Representative will designate another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but shall be within the military boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

#### 1.5.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers which, in the opinion of the Contracting Officer's Representative, require exterior painting or maintenance will not be allowed on the military property.

#### 1.5.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse with construction equipment or other vehicles grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

#### 1.5.6 New Building

In the event a new building is constructed for the temporary project field office, it shall be a minimum 12 feet in width, 16 feet in length and have a minimum of 7 feet headroom. It shall be equipped with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. It shall be provided with a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building shall be waterproof, shall be supplied with heater, shall have a minimum of two doors, electric lights, a telephone, a battery operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. Approved sanitary facilities shall be furnished. The windows and doors shall be screened and the doors provided with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins shall be non-removable. The windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be protected by bars or heavy mesh screens to prevent easy access to the building through these panels. In warm weather, air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature 11 degrees C (20 degrees F) below the outside temperature when the outside temperature is 95 degrees F, shall be furnished. Any new building erected for a temporary field office shall be maintained by the Contractor during the life of the contract and upon

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completion and acceptance of the work shall become the property of the Contractor and shall be removed from the site. All charges for telephone service for the temporary field office shall be borne by the Contractor, including long distance charges up to a maximum of \$75.00 per month.

#### 1.5.7 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

#### 1.6 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER:

This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE, SECTION 00700, entitled "DEFAULT (FIXED-PRICE CONSTRUCTION)". In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

1. The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any

given month.

2. The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

3. A schedule of monthly anticipated adverse weather delays, based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. This schedule will accompany the Task Order. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. Adverse weather days were determined based on the following four elements:

- Precipitation greater than or equal to .10 inch.
- Minimum temperature less than or equal to 32 degrees F.
- Maximum temperature greater than or equal to 100 degrees F.
- Surface wind greater than or equal to 20 MPH.

1.6.1 In the event the Contractor's work force is required to evacuate any part of the working area during working hours established by the Contractor for this contract, or the Contractor is barred from entering the job site due to Government delays, the Government will then make an adjustment under the Contract Clause entitled, FAR 52.212-12, "SUSPENSION OF WORK". The Government's liability will be considered to be limited to reimbursement for loss of time of Contractor's employees and equipment which otherwise would have been employed on the job. In the event the Contractor is required to evacuate the area or delayed entrance to area, the completion times will be adjusted accordingly.

1.6.1.1 The Contractor shall notify the Contracting Officer's Representative when a work stoppage occurs for recording purposes. Otherwise, the work stoppage will not be credited to the Contractor.

1.6.11 The Contractor may be required, without advance notice, to move work to a different location. The Contractor shall be prepared to increase or decrease his work forces to perform work in the relocated area at no additional cost to the Government.

1.7 GOVERNMENT FIELD OFFICE (NOT USED)

1.8 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

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1.9 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 42 inches high, supported and tightly secured to steel posts located on maximum 10 foot centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.10 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.11 Vacuum Sweeper

A vacuum sweeper and operator shall be on site and operating during construction for all projects on airfields or within the airfield compound, such as flightline roads or parking lots (may also be required on roads and

parking lots that have access to the flightline). This is to control FOD.

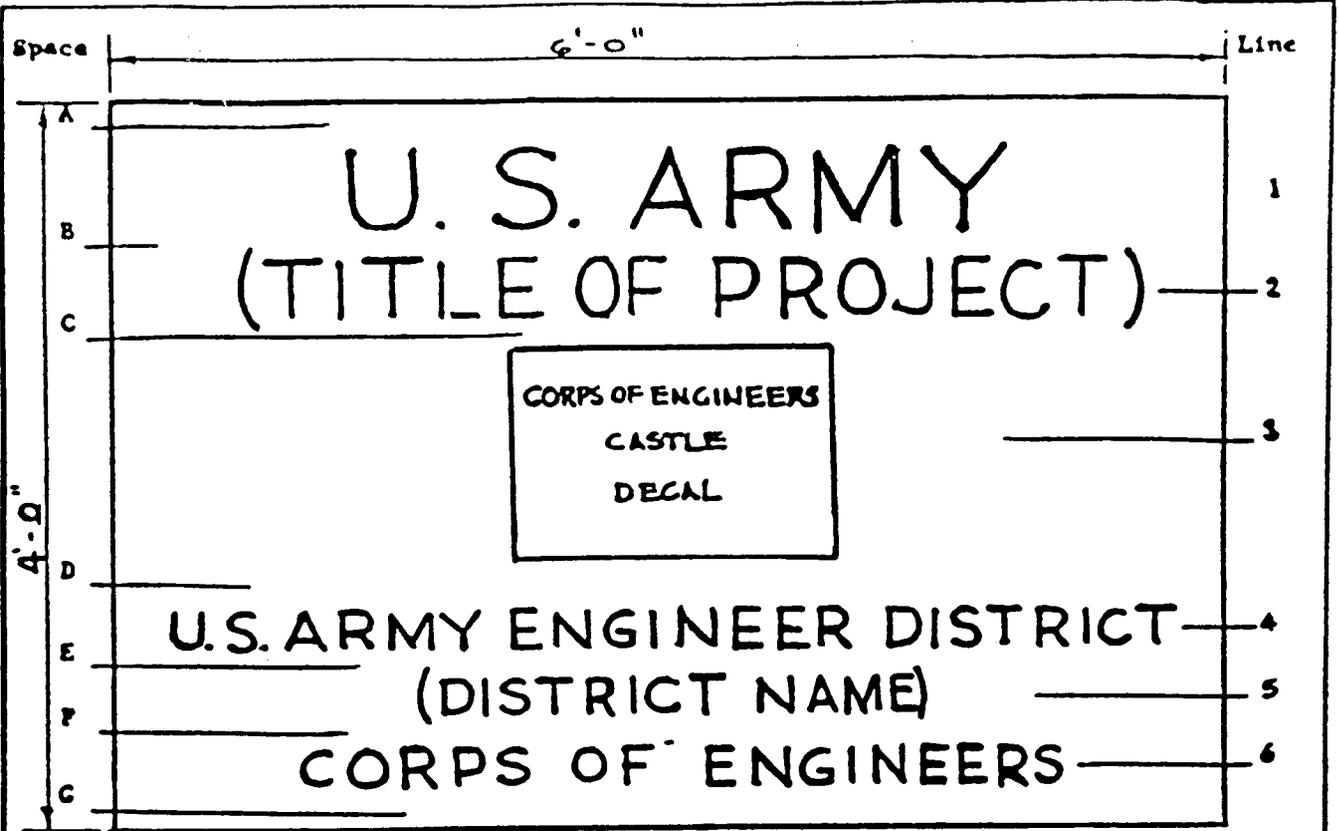
#### 1.12 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

#### 1.13 WEEKLY COORDINATION MEETINGS

The Contractor shall participate in weekly coordination meetings with representatives of the Contracting Officer and User. The Contractor shall be responsible for preparing the Contractor's agenda and tracking action items. Typical topics shall consists of: review of previous weeks activities and progress; forecast of following week's activities and progress; any utility outages; pending submittals; late submittals; pending modifications; anticipated modifications; and any other concerns/and/or issues. As a minimum, the Contractor shall have in attendance their on-site QC; project manager and whom ever else the Contractor deems necessary.

-- End of Section --



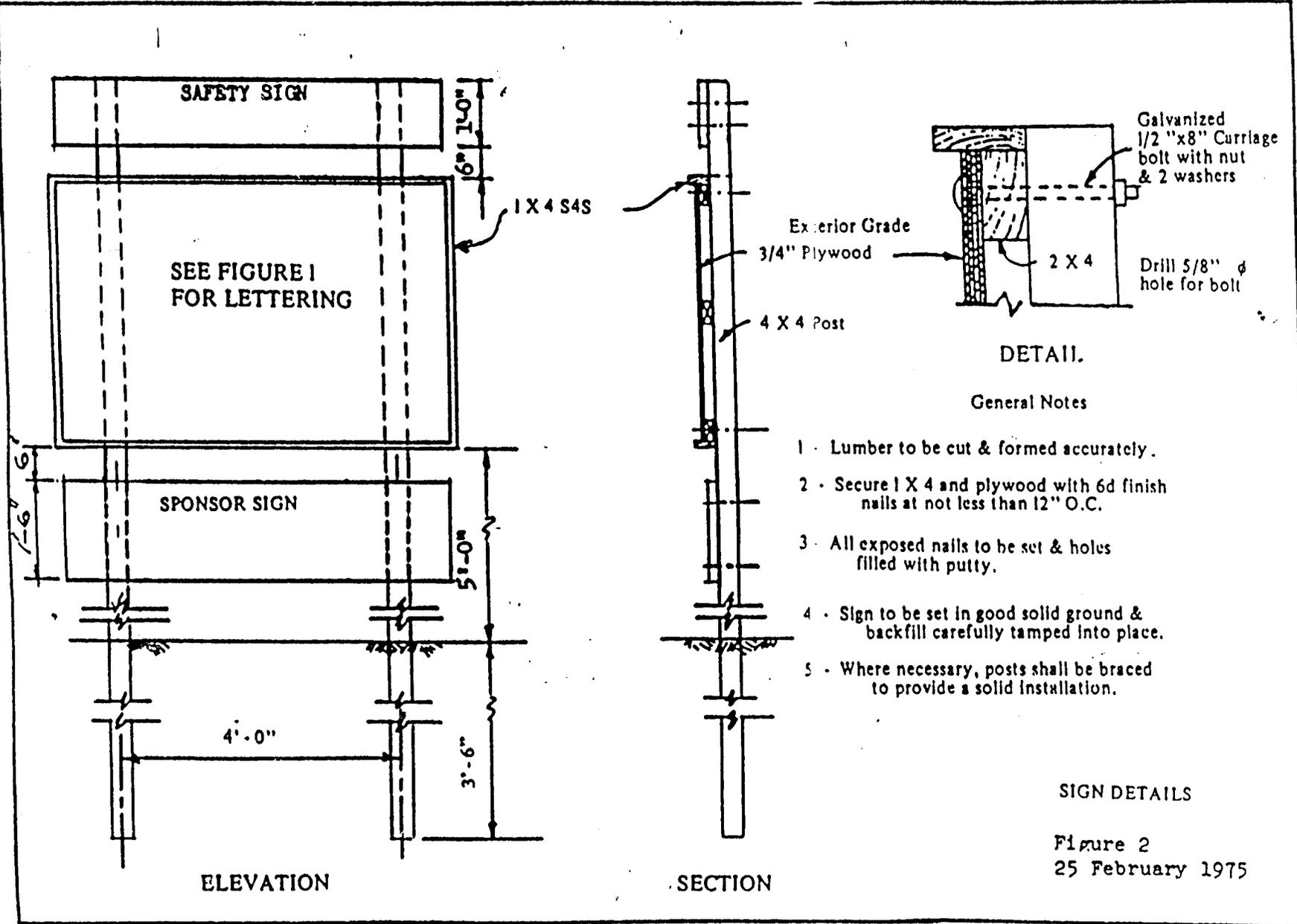
SCHEDULE

<u>Space</u>	<u>Height</u>	<u>Line</u>	<u>Description</u>	<u>Letter Height</u>	<u>Strokes</u>
A	3"	1	U. S. ARMY	5 1/2"	7/8"
B	2"	2	PROJECT NOMENCLATURE	1"	5/8"
C	2"	3	CORPS OF ENGINEERS CASTLE (DECAL)	1 1/2"	—
D	3"	4	U. S. ARMY ENGINEER DISTRICT	2 3/4"	3/8"
E	2"	5	DISTRICT NAME	2 1/4"	1/4"
F	2"	6	CORPS OF ENGINEERS	2 1/2"	3/8"
G	3"				

Lettering Color -- Black

PROJECT SIGN  
(Army-Civil Works)

Figure 1  
14 August 1972



SIGN DETAILS

Figure 2  
25 February 1975

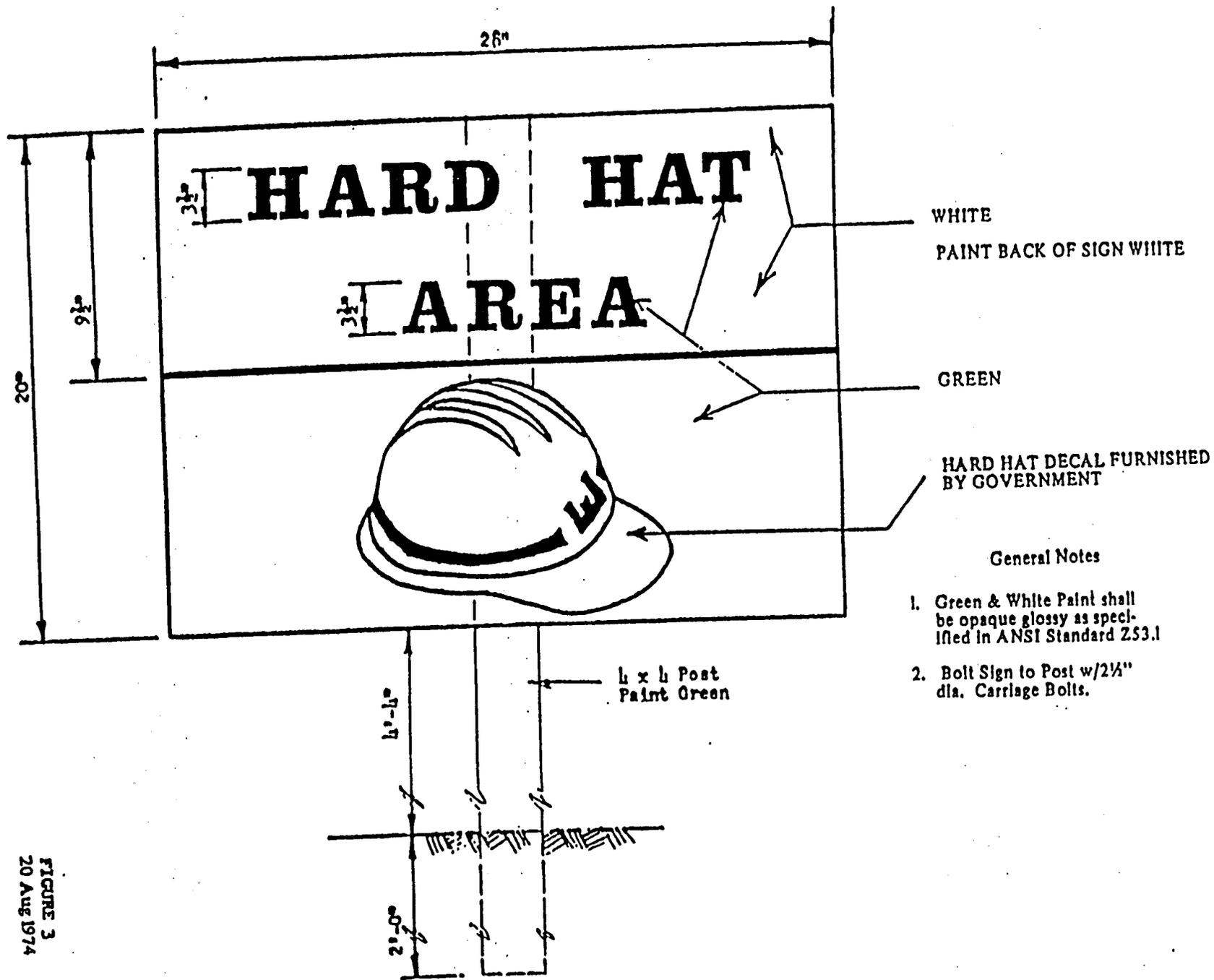


FIGURE 3  
20 Aug 1974