

REQUIREMENTS and SPECIFICATIONS TO CONSTRUCT

**BID SET
GRAVESITE RESTORATION
MAUI VETERANS CEMETERY, PHASE II
JOB NO.: CA-1208-C2
FAI NO.: HI-14-33
TAX MAP KEY: 2-4-002: 009
MAKAWAO, MAUI, HAWAII**

FOR AND BY THE **STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF VETERANS SERVICES**

AUGUST 2017

Civil Engineer: AECOM Technical Services, Inc.
Landscape Architect: PBR Hawaii & Associates, Inc.

TABLE OF CONTENTS

TITLE PAGE
 TABLE OF CONTENTS

A.0.2.0	GENERAL REQUIREMENTS	1
A.0.2.1	PROJECT REQUIREMENTS.....	1
A.0.2.2	ALTERNATES.....	6
A.0.2.3	PROJECT MANAGEMENT AND COORDINATION.....	8
A.0.2.4	CONSTRUCTION PROGRESS DOCUMENTATION.....	13
A.0.2.5	SUBMITTAL PROCEDURES.....	20
A.0.2.6	QUALITY REQUIREMENTS.....	23
A.0.2.7	TEMPORARY FACILITIES AND CONTROLS.....	29
A.0.2.8	EXECUTION REQUIREMENTS	44
A.0.2.9	CLOSEOUT PROCEDURES	50
A.1.0	DESCRIPTION/SPECIFICATIONS/WORK STATEMENT	54
A.1.1	NCA MISSION.....	54
A.1.2	SCOPE OF WORK.....	54
A.1.3	ADDITIONAL COPIES OF SPECIFICATIONS AND DRAWINGS	54
A.1.4	FIRE SAFETY	54
A.1.5	OPERATIONS AND STORAGE AREAS	55
A.1.6	INTERRUPTION OF UTILITY SERVICES.....	56
A.1.7	SITE INSPECTION	57
A.1.8	PROTECTION OF EXISTING VEGETATION, GRASS, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS	57
A.1.9	RESTORATION	58
A.1.10	PROFESSIONAL SURVEYING SERVICES.....	58
A.1.11	LAYOUT OF WORK.....	58
A.1.12	AS-BUILT DRAWINGS	59
A.1.13	USE OF ROADWAYS	59
A.1.14	NOT USED	59
A.1.15	USE OF WATER	59
A.1.16	HISTORIC PRESERVATION.....	60
A.1.17	REPORTING REQUIREMENTS.....	60
A.1.18	IDENTIFICATION, PARKING, SMOKING, AND VA REGULATIONS.....	61
A.1.19	INSURANCE – WORK ON A GOVERNMENT INSTALLATION	62
A.1.20	ORIENTATION FOR CONTRACTOR EMPLOYEES	63
A.2.0	SPECIFIC REQUIREMENTS.....	64
A.2.1	CONTRACTOR DUTIES AND RESPONSIBILITIES.....	64
A.2.2	REQUIRED DOCUMENTATION	66
A.2.3	UTILITY LINES COMPLIANCE.....	66
A.2.4	GENERAL PARAMETERS	66
A.2.5	WORK ENVIRONMENT.....	68
A.2.6	CONTRACTOR FURNISHED ITEMS.....	68
A.3.0	CONTRACTOR PERSONNEL.....	71
A.3.1	CONDUCT	71
A.3.2	WORKER PARKING.....	71
A.3.3	RESPONSIBILITIES AND VIOLATIONS	71
A.4.0	LABOR FORCE, EQUIPMENT AND SAFETY	73
A.4.1	TIME	73
A.4.2	LABOR	73

Gravesite Resoration
 Maui Veterans Cemetery, Phase II
 Makawao, Island of Maui, Hawaii
 Job No. CA-1208-C2, FAI No. HI-14-33

A.4.3	SAFETY.....	73
A.5.0	GOVERNMENT RESPONSIBILITIES	74
A.5.1	PRECONSTRUCTION	74
A.5.2	ASSISTANCE.....	74
A.6.0	GRAVE MARKER REALIGNMENT, RESETTING, AND BACKFILL.....	75
A.6.1	OVERVIEW	75
A.6.2	GRAVE MARKER LOCATIONS	76
A.6.3	RECORD KEEPING AND REPORTING.....	76
A.6.4	WORKER ACTIVITY SEQUENCE.....	76
A.6.5	GRAVE MARKER SPECIFICATIONS	77
A.6.6	GRAVE MARKER CLEANING GENERAL INFORMATION	80
A.6.7	DEFINITION	80
A.6.8	CONTRACTOR DUTIES AND RESPONSIBILITIES	80
A.6.9	RECORD KEEPING AND REPORTING.....	80
A.6.10	CLEANING OF GRAVE MARKERS	80
A.6.11	PHASING AND WORK SEQUENCING	81
A.6.12	MARKING OF GRAVESITES	82
A.7.0	TURFGRASS RENOVATION	83
A.7.1	TURF ESTABLISHMENT BY SEED	84
A.7.2	TURF ESTABLISHMENT PERIOD	85
A.7.3	ROOT BARRIERS.....	86
A.8.0	CONTRACT MANAGEMENT.....	87
A.8.1	REPRESENTATIVES OF THE CONTRACTING OFFICER.....	87
A.8.2	PROJECT MANAGER	87
A.9.0	CONSTRUCTION MANAGEMENT SERVICES	89
A.10.0	INSPECTION AND MONITORING PROCEDURES.....	90

A.0.2.0 GENERAL REQUIREMENTS

A.0.2.1 PROJECT REQUIREMENTS

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Project consists of replacing the grass in the existing veterans cemetery and clean, adjust and realign the headstones in Plot Areas 1-11 and 16 and MIA areas. Additive Alternate #1 includes regressing of the re-grassing and regrading of the Committal Shelter area and the installation of a root barrier along Baldwin Avenue.
1. Project Location: Maui Veterans Cemetery
3355 Baldwin Avenue
Makawao, Maui, Hawaii
- B. Perform operations and furnish equipment, tools, materials, related items and labor necessary to execute, complete and deliver the Work as required by the Contract Documents.
- D. The sections into which these specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to work specified within each section.
- E. Contractor shall not alter the Drawings and Specification. If an error or discrepancy is found, notify the State of Hawaii, Department of Defense (SDOD), Engineering Office (HIENG) Designated Representative (HIENG-DR).
- F. Specifying of interface and coordination in the various specification sections is provided for information and convenience only. These requirements in the various sections shall complement the requirements of this section.

1.02 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated and include incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a", "an", and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred, as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the Work.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the section text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words “shall”, “shall be”, or “shall comply with”, depending on the context, are implied where a colon (:) is used within a sentence or phrase.
3. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research’s “Encyclopedia of Associations” or in Columbia Books’ “National Trade & Professional Associations of the U.S.”.

B. Terms

1. Directed: Terms such as “directed”, “requested”, “authorized”, “selected”, “approved”, “required”, and “permitted” mean directed by the HIENG-DR, requested by the HIENG-DR, and similar phrases.
2. Indicated: The term “indicated” refers to graphic representations, notes, or schedules on drawings or to other paragraphs or schedules in specifications and similar requirements in the Contract Documents. Terms such as “shown”, “noted”, “scheduled”, and “specified” are used to help the user locate the reference.
3. Furnish: The term “furnish” means to supply and deliver to project site, ready for unloading, unpacking, assembly, and similar operations.
4. Install: The term “install” describes operations at project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
5. Provide: The terms “provide” or “provides” means to furnish and install, complete and ready for the intended use.
6. Installer: An installer is the Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-Subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
7. Submit: Terms such as “submit”, “furnish”, “provide”, and “prepare” and similar phrases in the context of a submittal, means to submit to the HIENG-DR via the Construction Manager (CM).

C. Industry Standards

1. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent

referenced. Such standards are made a part of the Contract Documents by reference.

2. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
3. Conflicting Requirements: If compliance with 2 or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to HIENG-DR for a decision before proceeding.

1.03 CONTRACT

- A. For Contract Conditions, refer to the Notice to Bidders, Offer Form, Special Notice to Bidders, Special Provisions, General Conditions and other contract requirements provided in the project specifications.

1.04 WORK SEQUENCE

- A. The Work shall be conducted in Four (4) phases.

All Phases: Clean, adjust, realign headstones and re-grass area. Work of each phase shall be substantially complete after the 90-day establishment period and accepted by the HIENG-DR. Phase 3 is made up of bid additive alternate areas, as shown on the plans. All work in Phase 3 will be based on the bid results and the decision of the HIENG-DR.

1.05 USE OF PREMISES AND WORK RESTRICTIONS

- A. General: Contractor shall have full use of construction zone for construction operations, including use of project site, during construction period. Contractor's use of premises is limited only by State's right to perform work or to retain other Contractors on portions of the project site.
- B. Contractor's use of premises is restricted as follows:
 1. Construction Times and Schedule:
 - a. Night, weekend and overtime work is allowed unless restricted elsewhere.
 - b. The project area shall be cleaned up and presentable for memorial events on Veterans Day in November and Memorial Day in May. No work is allowed on these days.
 - c. During internment ceremonies, the Contractor shall stop all noise producing work until the completion of the ceremony. Ceremonies usually last for 30 to 60 minutes, and may occur once per week. The Cemetery Operations Manager will notify the Contractor of internment ceremonies one week in advance.

2. Site Access and Parking:
 - a. Parking: Parking for the Contractor's employees (or Subcontractors) will be limited to the available areas within the designated Project Contract Limits or in areas designated by the HIENG-DR. Do not use parking stalls in regularly designated parking zones within the Facility grounds. Unauthorized vehicles parked in any area outside of the designated project construction site will be subject to towing at the Contractor's expense.
 - b. Maintain access to the Loading area through Project Contract Limits.
3. Sanitation: Provide self-contained combination toilet and urinal units as specified in TEMPORARY FACILITIES AND CONTROLS.
4. Noise and Dust Control:
 - a. In adjacent locations surrounding the project site, noise, dust and other disrupting activities, resulting from construction operations, are detrimental to the conduct of the Facility activities. Therefore, Contractor shall monitor its construction activities. Exercise precaution when using equipment and machinery to keep the noise and dust levels to a minimum.
 - b. To reduce loud disruptive noise levels, ensure mufflers and other devices are provided on equipment, internal combustion engines and compressors.
 - c. The HIENG-DR will require any construction activity that produces excessiveness of noise and dust to be performed during non-business hours. The HIENG-DR shall make the final determination. Overtime costs for the Contractor's employees and work force are the Contractor's responsibility.
5. Other Conditions:
 - a. Arrange for construction debris and trash to be removed from project site weekly.
 - b. Operate machinery and equipment with discretion and with minimum interference to driveways and walkways. Do not leave machinery and equipment unattended in the parking area and driveways.
 - c. Store materials in the areas as designated by the HIENG-DR. Locate construction equipment, machinery, equipment and supplies within the Project Contract Limits.
 - d. Keep access road to the project site free of dirt and debris. Provide, erect and maintain lights, barriers, signs, etc. when working on Facility driveways and walkways to protect pedestrians. Obey County traffic and safety regulations.

1.06 FUTURE WORK

- A. It is not anticipated the State will award a future contract that depends on the Work under this contract.

1.07 MISCELLANEOUS PROVISIONS

- A. Historical Archaeological Artifacts: All items having any apparent historical or archaeological interest discovered in the course of construction activities shall be carefully preserved. Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during the construction activities, work shall cease immediately in the adjacent vicinity of the find and the applicable site shall be protected

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

from further damage. The Contractor shall immediately contact the HIENG-DR and the State Historic Preservation Division (SHPD) DLNR at (808) 692-8015. SHPD will assess the significance of the find and recommend an appropriate mitigation measure if necessary.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

A.0.2.2 ALTERNATES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.
- B. The description of alternates is not intended to give a detailed description of all additional or deductive work required by the alternate item(s), as only the principal features of such additional or deductive work are listed.
- C. Should any one or all of the alternates become a part of the contract, the cost of all additional or deductive work required by the alternate item(s), even though not specifically mentioned herein, are included in the lump sum bid price.

1.02 DEFINITIONS

- A. Alternate: An amount proposed by Bidders (Offerors) and stated on the Bid Form for certain work defined herein that may be added to or deducted from the Total Lump Sum Bid Price amount if State decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Total Lump Sum Bid Price.

1.03 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into the Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this section. Specification sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

PART 3 - EXECUTION

3.01 SCHEDULE OF ALTERNATES

- A. Bid Additive Alternate Area No. 1: Regrassing of Committal Shelter Area
- B. Bid Additive Alternate Area No. 1: Installation of Root Barrier along Baldwin Ave.
- C. Bid Additive Alternate Area No. 1: Regrading of the Low Spot in the Committal Shelter Area.

A.0.2.3 PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
1. General project coordination procedures.
 2. Project meetings.

1.02 PERFORMANCE AND COORDINATION

- A. Contractor is in charge of the Work within the Project Contract Limits, and shall direct and schedule the Work. Include general supervision, management and control of the Work of this project, in addition to other areas more specifically noted throughout the Specifications. Final responsibility for performance, interface, and completion of the Work and the Project is the Contractor's.
- B. The Contractor is responsible for jobsite Administration. Provide a competent superintendent on the job and provide an adequate staff to execute the Work. In addition, all workers shall dress appropriately and conduct themselves properly at all times. Loud abusive behavior, sexual harassment and misconduct will not be tolerated. Workers found in violation of the above shall be removed from the job site as directed by the HIENG-DR.
- C. The State will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the Prime Contractor in matters pertaining to other trades employed on the job.
- D. Coordination: Provide project interface and coordination as required.
1. Provide interface and coordination of all trades, crafts and subcontracts. Ensure and make correct and accurate connections of abutting, adjoining, overlapping, and related work. Provide anchors, fasteners, accessories, appurtenances, and incidental items needed to complete the Work, fully, and correctly in accordance with the Contract Documents.
 2. Provide excavation, backfilling and trenching for trades to install their work.

1.03 COOPERATION WITH OTHER CONTRACTORS

- A. The State reserves the right at any time to contract for or otherwise perform other or additional work within the Project Contract Limits. The Contractor of this project shall to the extent ordered by the HIENG-DR, conduct its work so as not to interfere with or

hinder the progress or completion of the work performed by the State or other Contractors.

- B. Cooperate fully with separate Contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract.
- C. Multiple prime Contractors performing work under separate agreements with the State may be present near the project location, adjacent to and abutting the Project Contract Limits. This Contractor shall coordinate activities, sequence of work, protective barriers and any and all areas of work interfacing with other Prime Contractor's work. Contractor shall provide a continuity of finishes, walks, landscape, etc. at abutting Contract Limits so no additional work will be required. Any damage to other Prime Contractor's Work committed by this Contractor (or its Subcontractor) shall be repaired promptly at no additional cost to the State.
- D. Coordinate Subcontractors and keep them informed of any work from the other Projects that may affect the site or the Subcontractor's work. If the Contractor has any questions regarding its coordination responsibilities or needs clarification as to the impact in scheduling of its work and the work of other projects, this Contractor shall notify the HIENG-DR in writing.
- E. Subject to approval by the HIENG-DR, this Contractor shall amend and schedule its work and operations to minimize disruptions to the work and operations of other projects.
 - 1. Relocate or remove and replace temporary barriers, fencing supports or bracing to allow work by others to proceed unimpeded. Do not remove required barriers supporting work until specified time or as approved by the HIENG-DR. This does not relieve the Contractor of the responsibility of proper coordination of the work. If directed by the HIENG-DR, leave in place any temporary barriers.
 - 2. Coordinate work that abuts or overlaps work of the other projects with the HIENG-DR and other Prime Contractors to mutual agreement so that work is 100 percent complete with continuity of all materials, systems and finishes.
 - 3. When directed by the HIENG-DR, provide access into the construction zone to allow the other project's Contractor(s) to perform their Work and work that must be interfaced.
 - 4. Contractor shall adjust and coordinate its Work and operations as required by the other projects as part of the Work of this contract without additional cost or delay to the State.
 - 5. When directed by the HIENG-DR, provide a combined Contractor's construction schedule.
- F. Other Contracts: Known projects that are in design or in construction are indicated on the plans.

1.05 SUBMITTALS

- A. Photo Documentation: Prior to the start of jobsite work, the Contractor shall photo document the existing conditions at the site and file with the HIENG-DR one complete set of documents.
- B. Reporting: Submit meeting minutes and schedule updating as specified.

1.06 PROJECT MEETINGS AND TRAINING

- A. General: Schedule and conduct meetings and conferences as directed by the HIENG-DR.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify HIENG-DR of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Contractor record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including HIENG-DR, within 7 days of the meeting.
- B. Preconstruction Conference: HIENG-DR shall schedule a preconstruction conference before the start of construction, at a time convenient to the HIENG-DR, but no later than 7 days before the Project start date or jobsite start date whichever is later. Conference will be held at the Project site or another convenient location. The HIENG-DR shall conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: HIENG-DR, and design consultants; Facility Users; Contractor and its superintendent; major Subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and coordination.
 - d. Designation of responsible personnel.
 - e. Use of the premises.
 - f. Responsibility for temporary facilities and controls.
 - g. Parking availability.
 - h. Office, work, and storage areas.
 - i. Equipment deliveries and priorities.
 - j. First aid.
 - k. Security.

- I. Progress cleaning.
 - m. Working hours.
- C. Progress Meetings: Conduct progress meetings at monthly or other intervals as determined by the HIENG-DR. Coordinate dates of meetings with preparation of payment requests.
 1. Attendees: In addition to HIENG-DR, each Contractor, Subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Outstanding Requests for information (clarification).
 - 2) Interface requirements.
 - 3) Sequence of operations.
 - 4) Status of outstanding submittals.
 - 5) Deliveries.
 - 6) Off-site seed production.
 - 7) Access.
 - 8) Site utilization.
 - 9) Temporary facilities and controls.
 - 10) Work hours.
 - 11) Hazards and risks.
 - 12) Progress cleaning.
 - 13) Quality and work standards.
 - 14) Force Account work.
 - 15) Change Orders and Change Proposals.
 - 16) Documentation of information for payment requests.
 - c. Corrective Action Plan: Contractor shall provide a plan of corrective action for any item which is delayed or expected to be delayed, then that item impacts the contractual dates.
 3. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

A.0.2.4 CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Contractor's Construction Schedule.
2. Schedule of Submittals.
3. Schedule of Prices.
4. Payment Application.

1.02 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical activities are activities on the critical path and control the total length of the project. They must start and finish on the planned early start and finish times.
2. Predecessor activity is an activity that must be completed before a given activity can be started.

B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of project.

C. Critical Path: The longest continuous chain of activities through the network schedule that establishes the minimum overall Project duration and contains no float.

D. Event: The starting or ending point of an activity.

E. Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either the State or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.

3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

F. Schedule of Prices: A statement furnished by Contractor allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Payment Applications.

1.03 SUBMITTALS

A. Required Submittals: Submit 8 sets of the list of the required submittals, by Specification section, within 15 days after award of the contract or upon earlier written instructions from the HIENG-DR.

1. The listing shall indicate and include the following:
 - a. The number of copies required for submittal.
 - b. Planned submittal date.
 - c. Approval date required by the Contractor.
 - d. A space where the "date of submittal" can be inserted.
 - e. A space where the "date of approval" can be inserted.
 - f. A space where an "action code" can be inserted.

B. Construction Schedule: Submit 7 sets of the Construction Schedule for review within 15 days after the award of the contract or upon earlier written instructions from the HIENG-DR.

C. Schedule of Prices: Submit 3 sets of the Schedule of Prices integrated with the Construction Schedule for review within 15 days after the award of the contract or upon earlier written instructions from the HIENG-DR.

D. Payment Application: Submit the payment application at earliest possible date and no sooner than the last day of the month after all payroll affidavits, updated submittal registers, and schedules have been submitted.

1.04 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate Contractors.

B. Construction Schedule: Coordinate Contractor's Construction Schedule with the Schedule of Prices, Submittals Schedule, loaded monthly event activity, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

- C. Schedule of Prices: Coordinate preparation of the schedule with preparation of Contractor's Construction Schedule.

PART 2 - PRODUCTS

2.01 SCHEDULE OF SUBMITTALS

- A. Furnish required submittals specified in this section and in the Technical Sections. Submittals include one or more of the following: shop drawings, material samples, technical data, material safety data information, schedules of materials, schedules of operations, guarantees, certifications, operating and maintenance manuals, and field posted as-built drawings.
- B. Preparation: Furnish a schedule of submittals to HIENG-DR.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Prices, and Contractor's Construction Schedule.
 - 2. The schedule shall accommodate a minimum of 25 calendar days for the State's review, as applicable for the Island the project is located.
 - 3. Prepare and submit an updated list to the HIENG-DR at monthly intervals or as directed by the HIENG-DR. The listing shall reflect all approvals received since the last update.

2.02 CONTRACTOR'S CONSTRUCTION SCHEDULE - PERT CHART CRITICAL PATH METHOD (CPM)

- A. The construction schedule shall address the entire project, to the extent required by the Contract Documents, and shall show an expedient and practical execution of work. If requested by the HIENG-DR, the Contractor shall participate in a preliminary meeting to discuss the proposed schedule and requirements prior to submitting the schedule.
- B. The Construction Schedule shall indicate the following:
 - 1. Elements of the Project in detail time scaled by month or by week, and a project summary.
 - 2. The order and interdependence of activities and the sequence in which the work is to be accomplished.
 - 3. How the start of a given activity is dependent upon the completion of preceding activities and how its completion restricts the start of following activities.
 - 4. The submittal and approval of shop drawings, samples, procurement of critical materials and equipment, receipt of materials with estimated costs of major items for which payment will be requested in advance of installation, fabrication of special materials and equipment, and their installation and testing.

5. Provide a separate report with the following:
 - a. The description of the activity.
 - b. The duration of time in calendar days.
 - c. For each activity indicate the early start date.
 - d. For each activity indicate the early finish date.
 - e. For each activity indicate the late start date.
 - f. For each activity indicate the late finish date.
 - g. Total float time.
 - h. Cost of event.
 - i. Contract-required dates for completion of all or parts of the Work.
 - j. Events are to be used on "Monthly Progress Report" for monthly payment request.

- C. Upon completion of the HIENG-DR's review, the Contractor shall amend the schedule to reflect the comments. If necessary, the Contractor shall participate in a meeting with the HIENG-DR to discuss the proposed schedule and changes required. Submit the revised schedule for review within 7 calendar days after receipt of the comments.

- D. Use the reviewed schedule for planning, organizing and directing the work, for reporting progress, and for requesting payment for the work completed. Unless providing an update, do not make changes to the reviewed schedule without the HIENG-DR's approval.

- E. Should changes to the schedule be desired, submit a request in writing to the HIENG-DR and indicate the reasons for the proposed change. If the changes are major, the HIENG-DR may require the Contractor to revise and resubmit the schedule at no additional cost to the State. Contractor shall mitigate the impact of all changes by readjusting the sequence of activities, duration of time, or resources utilizing available float.
 1. A change is major if, in the opinion of the HIENG-DR, the change affects the substantial completion date or other contractual and milestone dates.
 2. Minor changes are those that only affect activities with adequate float time.

- F. Once the schedule is reviewed by the HIENG-DR, the Contractor shall submit 6 sets of the revised schedule within 14 calendar days.

- G. Throughout the duration of the project, the HIENG-DR may require more detailed breakdowns of activities, logic, and schedule submittals from the Contractor.

- H. Updated Schedules: Submit at monthly intervals or as directed by the HIENG-DR. The schedule shall reflect all changes occurring since the last update including the following:
 1. Activities started and completed during the previous period.
 2. The estimated duration to complete each activity that was started but not completed.
 3. Percentage of cost payable for each activity.

4. Modifications and pending proposed changes.
 5. Narrative report describing current and anticipated problem areas or delaying factors with their impact together with an explanation of corrective actions taken or proposed.
- I. Failure on the part of the Contractor to submit updated schedules may be grounds for the HIENG-DR to withhold progress payments for items noted on the schedule.
 - J. Contractor shall prosecute the work according to the CPM Schedule. The HIENG-DR shall rely on the reviewed Contractor's CPM Schedule and regular updates for planning and coordination. The HIENG-DR's review of the Contractor's CPM Construction Schedule does not relieve the Contractor of its obligation to complete the work within the allotted contract time. Nor does the review grant, reject or in any other way act on the Contractor's request for adjustments to complete remaining contract work, or for claims of additional compensation. These requests shall be processed in accordance with other relevant provisions of the contract.
 - K. If the HIENG-DR issues a field order or change order or other directive that affects the sequence or duration of work activities noted on the construction progress schedule, the Contractor shall promptly update the schedule. To accomplish this update, add, delete or revise the work activities noted or change the logic in the schedule to show the Contractor's plan to incorporate the change into the flow of work. All change orders and time extension requests that affect the construction schedule shall be evaluated based on their impact on the approved Construction Schedule.
 - L. If the current work is behind schedule or projected to be behind schedule, such as negative float on a critical activity or inability to meet the Contract Completion Date, the HIENG-DR may require the Contractor, at the Contractor's cost, to take remedial measures to get the project back on schedule. This may require increasing the work force, working overtime and weekends, air freighting materials, or other similar actions.
 - M. If at any time the HIENG-DR determines that any critical activity has fallen behind the CPM schedule by 15 calendar days or more, the Contractor shall submit a remedial plan to recapture the lost scheduled time. Include a revised schedule. Furnish the remedial plan no later than 7 calendar days from HIENG-DR's notification.
 - N. If an accelerated schedule is proposed, refer to GENERAL CONDITIONS, "CONSTRUCTION SCHEDULE".

2.03 SCHEDULE OF PRICES

- A. Furnish a schedule of prices to the HIENG-DR.
- B. Provide a breakdown of the Contract Sum in enough detail to facilitate developing and the continued evaluation of Payment Applications. Provide several line items for principal subcontract amounts, or for materials or equipment purchased or fabricated

and stored, but not yet installed, where appropriate. Round amounts to nearest whole dollar; total shall equal the Contract Price.

- C. Each item in the Schedule of Prices and Payment Application shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

2.04 PAYMENT APPLICATION

- A. Use the Schedule of Prices as the Monthly Construction Progress Report. Each Payment Application shall be consistent with previous applications and payments. The HIENG-DR shall determine the appropriateness of each payment application item.
- B. Payment Application Times: The date for each progress payment is the last day of each month. The period covered by each Payment Application starts on the first day of the month or following the end of the preceding period and ends on the last day of the month.
- C. Updating: Update the schedule of prices listed in the Payment application when Change Orders or Contract Modifications result in a change in the Contract Price.
- D. Provide a separate line item for each part of the Work where Payment Application may include materials or equipment purchased or fabricated and stored, but not yet installed.
- E. Differentiate between items stored on-site and items stored off-site. Include evidence of insurance or bonded warehousing if required.
- F. Provide separate line items for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- G. Payment Application Forms: Use and submit copies of the Payment Application and Construction Progress forms provided by Department. Furnish 7 copies.
- H. Application Preparation: Complete every entry on form. Execute by a person authorized to sign legal documents on behalf of the Contractor.
 - 1. Entries shall match data on the Schedule of Prices and Contractor's Construction Schedule. Use updated schedules if revisions were made. Include amounts of Change Orders and Contract Modifications issued before last day of construction period covered by application.
- I. No payment will be made until the following are submitted each month:
 - 1. Monthly Estimate, 7 copies.
 - 2. Monthly Progress Report, 7 copies.
 - 3. Statement of Contract Time, 7 copies.
 - 4. Updated Submittal Register, 1 copy.
 - 5. Updated Progress Schedule, 1 copy.
 - 6. All Daily Reports, 1 copy.
 - 7. All Payroll Affidavits for work done, 1 copy.

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

- J. Retainage: The Department will withhold retainage in compliance with the GENERAL CONDITIONS.
- K. Transmittal: Submit the signed original and 6 copies of each Payment Application for processing.

2.05 CONTRACTOR DAILY PROGRESS REPORTS

- A. The General Contractor and all Subcontractors shall keep a daily report of report events.
- B. The form of the Contractor Daily Progress Report shall be as directed by the HIENG-DR.
- C. Submit copies of the previous week's reports on Monday morning at 10:00 a.m.
- D. Submit copies of the reports with the monthly payment request for the whole period since the last payment request submittal.
- E. Deliver the reports in hard copy, by e-mail, or web based construction management as directed by the HIENG-DR.

PART 3 - EXECUTION (Not Used)

A.0.2.5 SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

1.02 SUBMITTAL PROCEDURES

- A. Coordinate Work and Submittals: Contractor shall certify the submittals were reviewed and coordinated.
- B. Submittal Certification: Provide in MS Word when submitting electronically. HIENG-DR will provide an electronic copy of the Submittal Certification. Provide a reproduction (or stamp) of the "Submittal Certification" and furnish the required information with all submittals. Include the certification on:
1. The title sheet of each shop drawing, or on
 2. The cover sheet of submittals in 8-1/2 inch x 11-inch format, or on
 3. One face of a cardstock tag (minimum size 3-inch x 6-inch) tied to each sample. On the sample tag, identify the sample to ensure sample can be matched to the tag if accidentally separated. The opposite face of the tag will be used by the HIENG-DR to receive, review, log stamp and include comments.
- C. Variances: The Contractor shall request approval for a variance. Clearly note any proposed deviations or variances from the Specifications, Drawings, and other Contract Documents on the submittal and also in a separately written letter accompanying the submittal.

Gravesite Restoration
 Maui Veterans Cemetery, Phase II
 Makawao, Island of Maui, Hawaii
 Job No. CA-1208-C2, FAI No. HI-14-33

D. Submittal Certification Form (stamp or digital)

CONTRACTOR'S NAME: _____
 PROJECT: _____
 JOB NO.: _____

As the General Contractor, we checked this submittal and we certify it is correct, complete, and in compliance with Contract Drawings and Specifications. All affected Contractors and suppliers are aware of, and will integrate this submittal into their own work.

SUBMITTAL NUMBER _____ DATE RECEIVED _____
 REVISION NUMBER _____ DATE RECEIVED _____
 SPECIFICATION SECTION NUMBER /PARAGRAPH NUMBER _____
 DRAWING NUMBER _____
 SUBCONTRACTOR'S NAME _____
 SUPPLIER'S NAME _____
 MANUFACTURER'S NAME _____

NOTE: DEVIATIONS FROM THE CONTRACT DOCUMENTS ARE PROPOSED AS FOLLOWS (Indicate "NONE" if there are no deviations)

CERTIFIED BY	
--------------	--

Note: Form can be combined with Design Consultant's Review stamp. This is available from the HIENG-DR.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 SUBMITTAL REGISTER AND TRANSMITTAL FORM

- A. Contractor shall use submittal register and transmittal forms as directed by the HIENG-DR.
- B. The listing of required submittals within this Section is provided for the Contractor's convenience. Review the specification technical sections and prepare a comprehensive listing of required submittals. Furnish submittals to the HIENG-DR for review.
- C. Contractor shall separate each submittal item by listing all submittals in the following groups with the items in each group sequentially listed by the specification section they come from:
 - 1. Administrative
 - 2. Data

3. Tests

4. Closing

D. Contractor shall separate all different types of data as separate line items all with the column requirements.

E. Contractor shall send monthly updates and reconciled copies electronically to the HIENG-DR and the Design Consultant in MS Word or MS Excel or other format as accepted by the HIENG-DR.

Section No. – Title	Shop Drawings & Diagrams	Samples	Certificates (Material, Treatment, Applicator, etc.)	Product Data, Manufacturer's Technical Literature	MSDS Sheets	Calculations	Reports (Testing, Maintenance, Inspection, etc.)	Test Plan	O & M Manual	Equipment or Fixture Listing	Schedules (Project Installation)	Maintenance Service Contract	Field Posted As-Built Drawings	Others	Guaranty or Warranty	Manufacturer's Guaranty or Warranty (Greater than one year)
Project Management and Coordination							■							■		
Construction Progress Documentation											■			■		
Submittal Procedures			■											■		
Quality Requirements			■				■				■		■	■		
Temporary Facilities and Controls							■							■		
Closeout Procedures	■								■				■	■	■	

A.0.2.6 QUALITY REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

- A. This section includes administrative and procedural requirements for quality assurance and for Contractor's Quality Control responsibilities and duties.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-control requirements for individual construction activities are specified in the sections that specify those activities. Requirements in those sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements of this section or by the Department or authorities having jurisdiction, do not limit the Contractor's responsibility to provide quality-control services.

1.02 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by HIENG-DR.
- C. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

1.03 SUBMITTALS

- A. Qualification Data: For QC Manager (alternate QC Manager), inspection and testing agencies, furnish evidence to demonstrate their capabilities and experience. Include proof of qualifications in the form of education, certifications, and license. For the testing agencies, include a recent report on the inspection of the testing agency by a recognized authority.
 - 1. The HIENG-DR may disapprove any QC Manager (alternate QC Manager), inspection or testing agency or individual employed by the agency when the HIENG-DR determines it is in the best interest of the State. The Contractor is not entitled to

any claim or cost increase or time extension due to the HIENG-DR's disapproval of an agency or individual.

B. Reports: Prepare and submit certified written reports that include the following:

1. Date of issue.
2. Project title and number.
3. Name, address, and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making tests and inspections.
6. Description of the Work and test and inspection method.
7. Identification of product and Specification Section.
8. Complete test or inspection data.
9. Test and inspection results and an interpretation of test results.
10. Ambient conditions at time of sample taking and testing and inspecting.
11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting and reinspecting.

C. Permits, Licenses, and Certificates: Submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.04 SCHEDULE FOR SUBMITTING INFORMATION AND REPORTS

A. Deliver the original and two copies each of the following to the State:

1. Combined Contractor Production and Contractor Quality Control Report, (one sheet): By [10:00 AM] the next working day after each day that work is performed.
2. QC Specialist Reports: By 10:00 AM the next working day after each day that work is performed, attached to the Contractor Quality Control Report;
3. Field Test Reports: Within two working days after the test is performed, attached to the Contractor Quality Control Report;

4. Monthly Summary Report of Tests: 2 copies attached to the Contractor Quality Control Report;
5. Testing Plan and Log: 2 copies, at the end of each month;
6. Rework Items List: 2 copies, by the last working day of the month;
7. Quality Control meeting minutes: 2 copies, within 2 working days after the meeting and;
8. Quality Control Certifications: As required by the paragraph titled "Quality Control Certifications."

1.05 QUALITY ASSURANCE

- A. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- C. Professional Architect or Engineer Qualifications: A professional architect or engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing architect or engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly; or product that are similar to those indicated for this Project in material, design, and extent.
- D. Inspection and Testing Agency Qualifications: An agency with the experience and capability to conduct testing and inspecting indicated, as documented by ASTM E-548, and that specializes in types of tests and inspections to be performed.

1.07 QUALITY CONTROL

- A. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
 1. Engage qualified inspection or testing agencies to perform quality-control services, unless services are indicated as the Department's responsibility.
 2. Notify HIENG-DR and the inspection or testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 3. Submit certified written reports of each quality-control service.

4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Retesting and Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that revised or replaced Work that failed to comply with requirements established by the Contract Documents.
- C. Testing Agency Responsibilities: Cooperate with the Department and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify the HIENG-DR and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
 5. Do not perform any duties of Contractor.
- D. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field-curing of test samples.
 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 6. Security and protection for samples and for testing and inspecting equipment at Project site.

E. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.08 QUALITY CONTROL MANAGER

A. Duties: Provide a Quality Control Manager at the work site to implement and manage the QC Program. In addition to implementing and managing the QC Program, the QC Manager may perform the duties of the Project Superintendent. The QC Manager is required to conduct the QC meetings, perform submittal review, ensure testing is performed and provide QC certifications and documentation required in this Contact. The QC Manager is responsible for managing and coordinating Testing Laboratory personnel and any other inspection and testing personnel required by this Contract.

B. Qualifications: An individual with a minimum of 10 years' experience as a superintendent, inspector, QC Manager, project manager, or construction manager on similar size and type construction contracts which included the major trades that are part of this Contract. The individual must have experience in the areas of hazard identification and safety compliance. It is desirable that the QC Manager completed the course "Construction Quality Management for Contractors" offered by the Navy or the Army Corps of Engineers or other similar course.

C. Approval: QC Manager shall be subject to the approval of the HIENG-DR. Unless the Contractor has a QC Manager on staff, the Contractor shall provide the names of at least three individuals, and shall rank the individuals based on the Contractor's preference to work with or hire. The HIENG-DR may approve all or any one of the individuals. If any individual is presently working for the Contractor as a QC Manager, the Contractor may choose to submit only one individual, and that individual is subject to approval.

1. Furnish evidence showing the individual(s) meets the qualifications, experience, training and other criteria required by this section.

1.09 RECORD (As-Builts) DRAWINGS

A. The QC Manager is required to ensure the record drawings and jobsite record sets are kept current on a daily basis in accordance with CLOSEOUT PROCEDURES.

1.20 NOTIFICATION OF NON-COMPLIANCE

A. Contractor will be notified of any detected non-compliance items. Take immediate corrective action after receipt of such notice.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 REPAIR AND PROTECTION

- A. General: On completion testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

3.02 STATE'S AUTHORITY

- A. Review and removal of Quality Control Personnel:
 - 1. All Quality Control organization personnel are subject to review by HIENG-DR and the HIENG-DR may interview any member of the Quality Control organization at any time in order to verify the submitted qualifications.
 - 2. The HIENG-DR has the authority to have the QC Manager replaced at any time for cause. Justifications may include, but are not limited to: not being on site when QC Manager's duties are required, or wrongfully approving substandard and noncompliant work.
 - 3. The Contractor is not entitled to any claim or cost increase or time extension due to the HIENG-DR's disapproval of an agency or individual.

A.0.2.7 TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

- A. Requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.
- B. Temporary utilities include but are not limited to, the following:
 - 1. Storm drainage.
 - 2. Water service and distribution.
 - 3. Sanitary facilities, including toilets, wash facilities, and drinking water facilities.
 - 4. Electric power service.
 - 5. Lighting.
 - 6. Telephone service.
- C. Support facilities include, but are not limited to, the following:
 - 1. Project signs.
 - 2. Storage sheds.
 - 3. Trash and refuse disposal.
 - 4. Erosion controls and site drainage.
 - 5. Lifts and hoists.
 - 6. Construction aids and miscellaneous services and facilities.
- D. Security and protection facilities and measures include, but are not limited to, the following:
 - 1. Environmental protection.
 - 2. Stormwater control.
 - 3. Barricades, warning signs, and lights.
 - 4. Fire protection.
- E. Related Sections: Refer to other sections for other temporary requirements.

1.02 USE CHARGES

- A. General: Cost or use charges for temporary facilities are not chargeable to the State and shall be included in the Contract Price. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:
 - 1. Other Contractors with agreements with the State working within the contract limits.
 - 2. Occupants of Project.
 - 3. Testing agencies.
 - 4. HIENG-DR and personnel of authorities having jurisdiction.

1.03 SUBMITTALS

- A. Temporary Utility Reports: Submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.
- B. Landfill Disposal Receipts: Submit copies of receipts issued by a landfill facility. Include receipts with Contractor Daily Progress Report

1.04 QUALITY ASSURANCE

- A. Standards: Comply with UBC Chapter 33, "Site Work, Demolition and Construction", ANSI A10.6, NECA's "Temporary Electrical Facilities", and NFPA 241, "Construction, Alteration, and Demolition Operations".
 - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.
 - 2. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70, "National Electrical Code".
 - a. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.05 PROJECT CONDITIONS

- A. Temporary Utilities: At earliest feasible time, when acceptable to the HIENG-DR, change over from use of temporary service to use of permanent service.
 - 1. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before HIENG-DR's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
 - 1. Keep temporary services and facilities clean and neat.
 - 2. Relocate temporary services and facilities as required by progress of the Work.

1.06 PREPARATION AND PROTECTION

- A. Protection of Property: Continually maintain adequate protection of the Work from damage and protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, utility systems located at and adjoining the job site. Repair, replace or pay the expense to repair damages resulting from Contractor's fault or negligence.

- B. Before starting work to be applied to previously erected constructions, make a thorough and complete investigation of the recipient surfaces and determine their suitability to receive required additional construction and finishes. Make any repair that is required to properly prepare surfaces, and coordinate the Work to provide a suitable surface to receive following Work.
- C. Commencing work by any trade implies acceptance of existing conditions and surfaces as satisfactory for the application of subsequent work, and full responsibility for finished results and assumption of warranty obligations under the Contract.
- D. Protect existing (including interiors) work to prevent damage by vandals or the elements. Provide temporary protection. Use curtains, barricades, or other appropriate methods. Take positive measures to prevent breakage of glass and damage to plastic, aluminum and other finishes.
- E. Repairs and Replacements: Promptly replace and repair damages to the approval of the HIENG-DR. Additional time required to secure replacements and to make repairs does not justify a time extension.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by HIENG-DR. Provide materials suitable for use intended.
- B. Plastic Enclosure Fence: Industry standard 4-feet high plastic fencing with metal (or wood) post supports at 10-feet on center connected with a top and bottom 12-gauge soft annealed galvanized tie wires securely connected to posts. Posts shall be capable of resisting a lateral load of 100 pounds measured at the top of the post.

2.02 EQUIPMENT

- A. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA recommended classes for exposures. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.
- B. Self Contained Combination Toilet and Urinal Units: Single occupant units of chemical, aerated recirculation, or combustion type; vented; fully enclosed with a glass fiber reinforced polyester shell or similar nonabsorbent material. One quarter of, or at least one unit(s) shall contain a handwash sink with potable water storage.
- C. Drinking Water Fixtures: Bottled water drinking water units or water cooler dispensing water at 45 - 55 degree F available at project site including paper cup supply.

- D. Electrical Outlets: Properly configured, NEMA polarized outlets to prevent insertion of 110 to 120 V plugs into higher voltage outlets; equipped with ground fault circuit interrupters, reset button, and pilot light.
- E. Data and Communication: Provide service and equipment throughout construction period.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
 - 1. Secure approval from HIENG-DR before modifications are made to the State Inspector's Field Office.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY UTILITY INSTALLATION

- A. General: Connect to existing service where directed by the HIENG-DR.
 - 1. Arrange with utility company, the State, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
 - 2. Provide adequate capacity at each stage of construction. Before temporary utility is available, provide trucked in services.
- B. Storm Drainage: If storm drains are not available or cannot be used, provide drainage ditches, similar facilities to prevent any flooding or ponding
- C. Water Service: A temporary tap into the facility's existing water system is allowed, subject to the following conditions:
 - 1. Comply with the Department of Health's and County water provider's requirements when tapping into the existing water system.
 - 2. Meter the tapped line and prior to water use, notify the HIENG-DR to observe an initial meter reading.
 - 3. Take monthly meter readings. Pay the State, on a monthly basis, for water used at the current rate per 1,000 gallons.
 - 4. Payments are to be by check, made payable to the "Director of Finance, State of Hawaii" and mailed as directed by the HIENG-DR:
 - 5. Checks shall be accompanied by the following information:
 - a. Name of facility, Project Name and Title and Job No.
 - b. Contractor's name
 - c. Initial meter reading for the month and final meter reading for the month.
 - d. Volume of water used and the amount due in payment for that water

6. Upon completion of the project and just prior to removal of the water meter, notify the HIENG-DR to observe a final meter reading.
 7. Should the Contractor at any time fail to comply with any or all of the above conditions, the Department may terminate the use of water. The Contractor shall remove the hookup within 48 hours of notification of such termination.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water fixtures for your workers.. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
1. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.
 2. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Provide separate facilities for male and female personnel.
 3. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel who handle materials that require wash up. Dispose of drainage properly. Supply cleaning compounds appropriate for each type of material handled.
 4. Locate toilets and drinking water fixtures so personnel need not walk more than 2 stories vertically or 200-feet horizontally to facilities.
- E. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment. Protect wiring, in conduits or other, measures when exposed to possible damage or traffic areas.
- F. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.
- G. Telephone Service: Provide a portable wireless telephone with voice-mail or messaging service for superintendent's use in making and receiving telephone calls when at the construction site.

3.03 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
1. Locate storage sheds, sanitary facilities, and other temporary support facilities for easy access or where shown on Contract Drawings or as directed by the HIENG-DR.
 2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion.
- B. Site Drainage:
1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining property nor endanger permanent Work or temporary facilities.
- C. Project Sign and Temporary Sign(s):
1. Provide and install project identification sign and other signs as listed. Sign designs are attached to Part 3 of this Section:

- a. Project Sign, project information and general format is provided as follows:

STATE
OF
HAWAII

GRAVESITE RESTORATION
Maui Veterans Cemetery, Phase II

DEPARTMENT OF DEFENSE
Major General Darryll D.M. Wong, Adjutant General

Office of Veterans Services - Ronald P. Han, Jr., Director

GOVERNOR DAVID Y. IGE

- b. Warning Sign
2. Install signs where directed by the HIENG-DR or where indicated to inform public and persons seeking entrance to the Project. Do not permit installation of unauthorized signs.
 3. Provide temporary signs to provide directional information to constructional personnel and visitors.
 4. Construct signs with durable materials, properly supported or mounted, and visible.
- D. Trash, Refuse Disposal:
1. Department of Health – Illegal Dumping Notice. See attachment to Part 3 of this section.
 - a. This Notice to be printed out on 8.5x11” paper.
 - b. This Notice to be posted at the job site field office and/or in locations visible to all contractors, subcontractors, suppliers, vendors, etc. throughout the duration of the project.
 2. Illegal Dumping of solid waste could subject the Contractor to fines and could lead to felony prosecution in accordance with Chapter 342H, HRS. For more information, see the following web site:
<http://www.hawaii.gov/health/environmental/waste/sw/pdf/Illdump.pdf>
 3. Provide waste collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste.
 4. Do not burn debris or waste materials on the project site.
 5. Do not bury debris or waste material on the project site unless specifically allowed elsewhere in these specifications as backfill material.
 6. Haul unusable debris and waste material to an appropriate off site dump area.
 - a. Water down debris and waste materials during loading operations or provide other measures to prevent dust or other airborne contaminants.
 - b. Vacuum, wet mop, or damp sweep when cleaning rubbish and fines which can become airborne from floors or other paved areas. Do not dry sweep.
 - c. Use enclosed chutes or containers to conveying debris from above the ground floor level.

7. Clean up shall include the collection of all waste paper and wrapping materials, cans, bottles, construction waste materials and other objectionable materials, and removal as required. Frequency of clean up shall coincide with rubbish producing events.

3.04 ENVIRONMENTAL CONTROLS

- A. General: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Dust Control:
 1. Prevent dust from becoming airborne at all times including non-working hours, weekends and holidays in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 60.1 Air Pollution Control.
 2. Contractor is responsible for and shall determine the method of dust control. Subject to the Contractor's choice, the use of water or environmentally friendly chemicals may be used over surfaces that create airborne dust.
 3. Contractor is responsible for all damage claims due to their negligence to control dust.
- C. Noise Control
 1. Keep noise within acceptable levels at all times in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 46 Community Noise Control. Obtain and pay for the Community Noise Permit when construction equipment or other devices emit noise at levels exceeding the allowable limits.
 2. Ensure mufflers and other devices are provided on equipment, internal combustion engines and compressors to reduce loud disruptive noise levels and maintain equipment to reduce noise to acceptable levels.
 3. Unless specified elsewhere, do not start construction equipment that meet allowable noise limits prior to 6:45 A.M. or equipment exceeding allowable noise levels prior to 7:00 A.M.
- D. Erosion Control
 1. During grading operations, maintain the grade to prevent damage to adjoining property from water and eroding soil.
 2. Install temporary berms, cut off ditches and other provisions needed for construction methods and operations. Should there be a question if the temporary measures are insufficient to prevent erosion, the HIENG-DR shall make the final determination.
 3. Construct and maintain drainage outlets and silting basins where shown on the Drawings and when required to minimize erosion and pollution of waterways during construction.

3.05 VIOLATION OF ENVIRONMENTAL PROVISIONS

- A. Violations of any of the above environmental control requirements or any other pollution control requirements; which may also be specified in the other Specifications sections, shall be resolved under the SUSPENSION and CORRECTIVE WORK Section of the GENERAL CONDITIONS.

3.06 BARRICADES AND ENCLOSURES

- A. Barricades: Before construction operations begin, erect temporary construction barricade(s) to prevent unauthorized persons from entering the project area and to the extent required by the HIENG-DR.
 - 1. Maintain temporary construction barricade(s) throughout the duration of the Work. During the course of the project, the HIENG-DR may require additional barricades be provided for the safety of the public. Contractor shall erect the additional barricade(s) at its own expense.
 - 2. Construction
 - a. plastic fencing

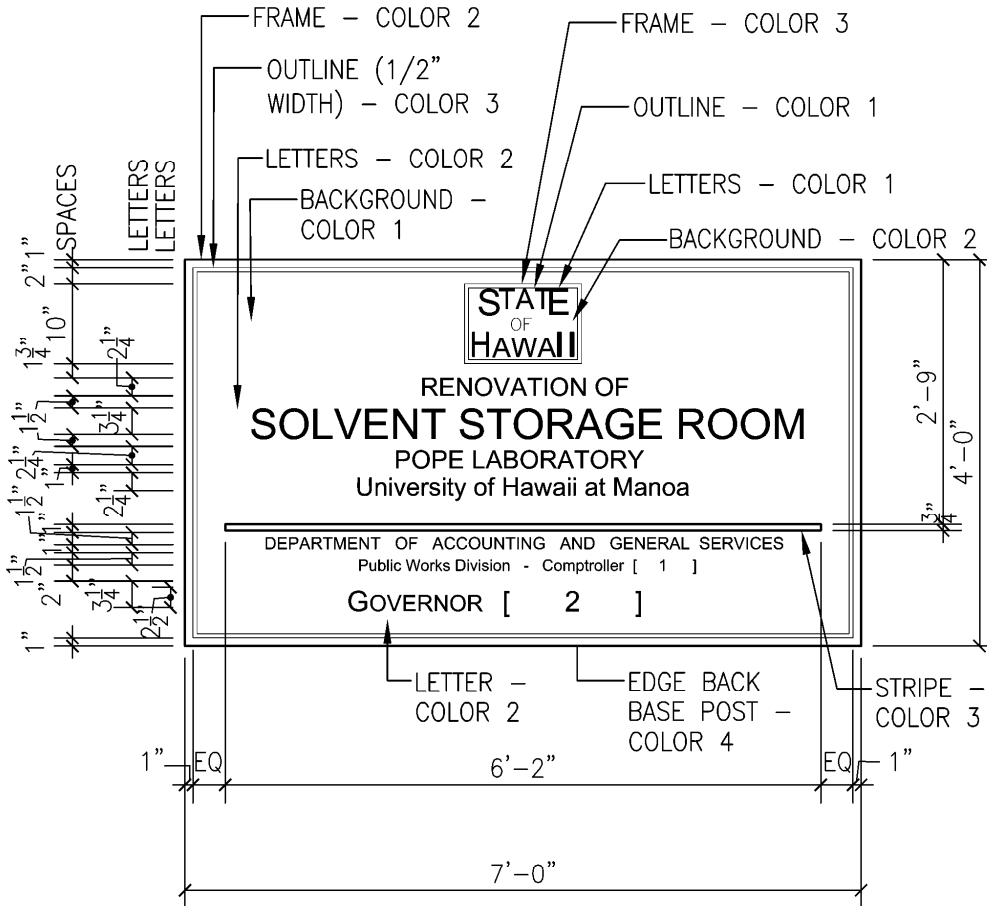
3.07 OPERATION, TERMINATION, AND REMOVAL

- A. Maintenance: Maintain facility in good condition until project completion.
- B. Termination and Removal: Remove each temporary facility when need for its service has ended, or when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are the property of Contractor. The Department reserves the right to take possession of Project identification signs.

3.08 ATTACHMENTS

- A. Project Sign Drawings.
 - 1. Standard Detail for Project Sign Layout - DETAIL A/TG 01500.
 - 2. Standard Detail for Project Sign Specifications - DETAIL B/TG 01500.
 - 3. Standard Detail for Project Sign Details - DETAIL C/TG 01500.
- B. Dust Control Fence Drawings: Standard Detail for Dust Control Fence - DETAILS D and E/TG 01500.
- C. Warning Sign: Requirements for Warning Sign.
- D. Department of Health – Illegal Dumping Notice

Gravesite Restoration
 Maui Veterans Cemetery, Phase II
 Makawao, Island of Maui, Hawaii
 Job No. CA-1208-C2, FAI No. HI-14-33



- [1] Comptroller's First, Middle Initial and Last Name
- [2] Governor's First, Middle Initial and Last Name

A
TG 01500
PROJECT SIGN LAYOUT
 SCALE: NTS

Note:
 Detail A /TG 01500 project information shown is a sample; project information and general format is provided in Section A.0.2.7.3.03.C.1.a.

LETTER STYLE

COPY IS CENTERED AND SET IN ADOBE TYPE FUTURA HEAVY. IF THIS SPECIFIC TYPE IS NOT AVAILABLE, FUTURA DEMI BOLD MAY BE SUBSTITUTED. COPY SHOULD BE SET AND SPACED BY A PROFESSIONAL TYPESETTER AND ENLARGED PHOTOGRAPHICALLY FOR PHOTO STENCIL SCREEN PROCESS.

ART WORK

CONSTANT ELEMENTS OF THE SIGN LAYOUT – FRAME, OUTLINE, STRIPE, AND OFFICIAL STATE INFORMATION – MAY BE DUPLICATED FOLLOWING WORKING DRAWING MEASUREMENTS, OR BE REPRODUCED AND ENLARGED PHOTOGRAPHICALLY USING A LAYOUT TEMPLATE IF PROVIDED. THE "STATE OF HAWAII" MASTHEAD SHOULD BE REPRODUCED AND ENLARGED AS SPECIFIED, USING THE ARTWORK AS SHOWN.

TITLES

THE SPECIFIC MAJOR WORK OF THE PROJECT UNDER CONSTRUCTION IS EMPHASIZED BY USING 3 3/4" TYPE, ALL CAPITALS. SECONDARY INFORMATION SUCH AS LOCATIONS OR BUILDINGS USES 2 1/4" TYPE, ALL CAPITALS. OTHER RELATED INFORMATION OF LESSER IMPORTANCE USES 2 1/4" (CAPITAL HEIGHT) IN LOWER CASE LETTERS. ALL LINES OF TYPE SHOULD NOT EXCEED THE WIDTH OF THE 6'-2" STRIPE.

MATERIALS

PANEL IS 3/4" EXTERIOR GRADE HIGH DENSITY OVERLAID PLYWOOD, WITH RESIN BONDED SURFACES ON BOTH SIDES.

PAINTS & INKS

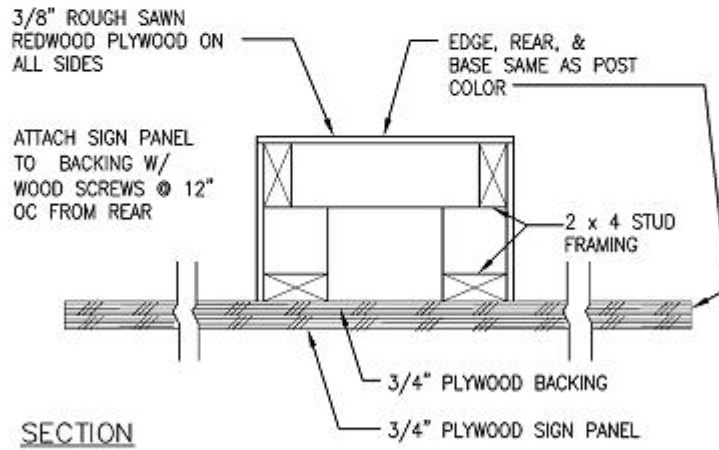
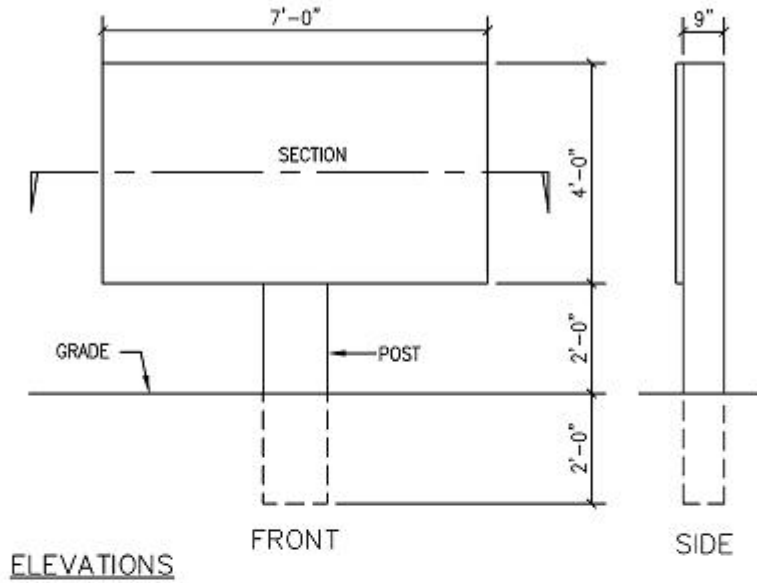
SCREEN PRINT INKS ARE MATTE FINISH. PAINTS ARE SATIN FINISH, EXTERIOR GRADE. REFERENCES TO AMERITONE COLOR KEY PAINT ARE FOR COLOR MATCH ONLY.

COLOR:	1.	1BL10A	BOHEMIAN BLUE
	2.	2H16P	SOFTLY (WHITE)
	3.	2VR2A	HOT TANGO (RED)
	4.	1M52E	TOKAY (GRAY)

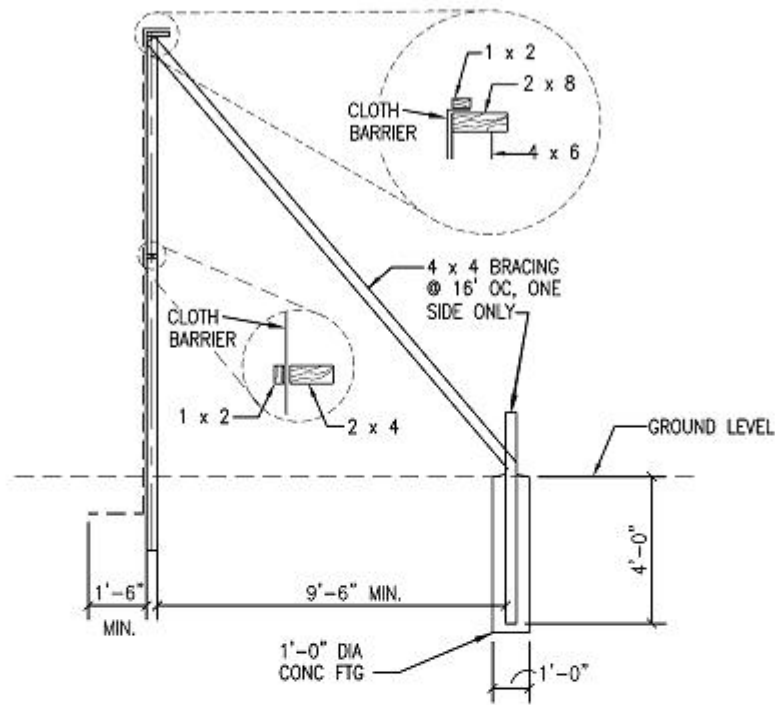


PROJECT SIGN SPECIFICATIONS

Gravesite Restoration
 Maui Veterans Cemetery, Phase II
 Makawao, Island of Maui, Hawaii
 Job No. CA-1208-C2, FAI No. HI-14-33



C PROJECT SIGN DETAILS
 TG 01500 SCALE: NTS



SECTION

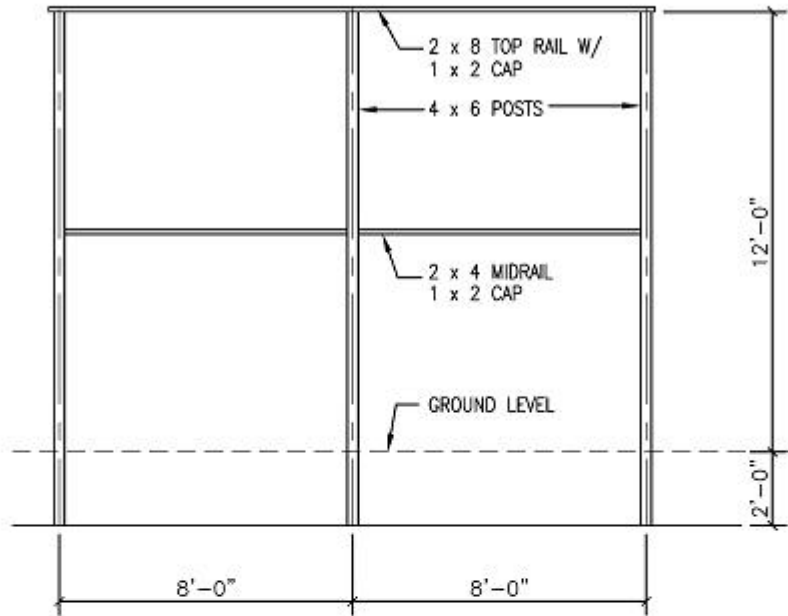
NOTES:

1. CLOTH BARRIER NOT SHOWN IN FRONT VIEW.
2. CLOTH BARRIER TO BE "GEOTEXTILE" OR "NURSERY SHADE".
3. LUMBER SIZES ARE NOMINAL INCHES.
4. AS SHOWN CLOTH TO BE BURIED AT BASE TO INDICATED DIMENSION.
5. 1 x 2 CLOTH BARRIER CAPS TO BE NAILED @ 12" OC.
6. BURLAP IS NOT ACCEPTABLE AS THE CLOTH BARRIER.
7. CLOTH TO HAVE NO HORIZONTAL SEAMS.
8. VERTICAL SEAMS TO BE MADE OVER UPRIGHTS ONLY.
9. ALL SEAMS TO BE CAPPED WITH MINIMUM 1 x 2.
10. ALL JOINTS TO BE SECURELY FASTENED BY MECHANICAL MEANS.



STANDARD DETAIL FOR
 DUST CONTROL FENCE

SCALE: NTS



ELEVATION

NOTES:

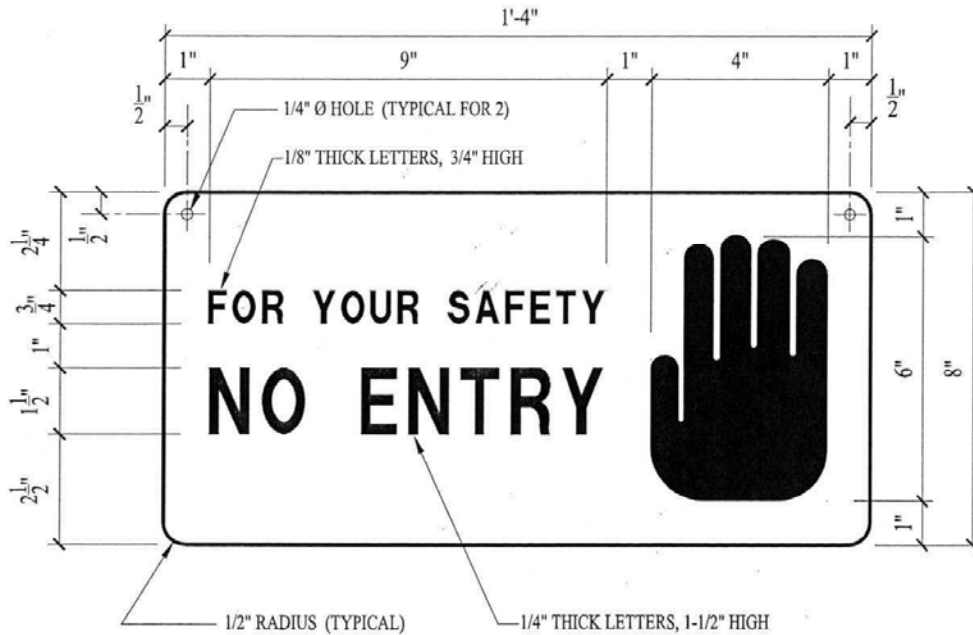
1. CLOTH BARRIER NOT SHOWN IN FRONT VIEW.
2. CLOTH BARRIER TO BE "GEOTEXTILE" OR "NURSERY SHADE".
3. LUMBER SIZES ARE NOMINAL INCHES.
4. AS SHOWN CLOTH TO BE BURIED AT BASE TO INDICATED DIMENSION.
5. 1 x 2 CLOTH BARRIER CAPS TO BE NAILED @ 12" OC.
6. BURLAP IS NOT ACCEPTABLE AS THE CLOTH BARRIER.
7. CLOTH TO HAVE NO HORIZONTAL SEAMS.
8. VERTICAL SEAMS TO BE MADE OVER UPRIGHTS ONLY.
9. ALL SEAMS TO BE CAPPED WITH MINIMUM 1 x 2.
10. ALL JOINTS TO BE SECURELY FASTENED BY MECHANICAL MEANS.



STANDARD DETAIL FOR
 DUST CONTROL FENCE

SCALE: NTS

REQUIREMENTS FOR WARNING SIGN



1. **General Requirements:** Furnish all labor, materials and equipment necessary to construct and install warning signs as specified hereinafter.
2. **Materials**
 - a. Backing: Backing shall be 6061-T6 aluminum 0.032-inch minimum thickness.
 - b. Paint: Paint shall be satin finish, exterior grade or factory baked enamel or a combination thereof.
3. **Colors:** Signs shall have white background. Remaining items shall be similar to Rust-Oleum Federal Safety Red.
4. **Requirements for Warning Sign:** Message configuration and dimensions shall be in accordance with the attached illustration.
5. **Installation**
 - a. Signs shall be located at 50-foot intervals around roped off work area or at all entrances in the case of interior work.
 - b. Signs shall be attached to the rope barrier, rope barrier supports, individual sign supports or buildings. Do not use nails to attach signs to building(s).
6. **Clean-up:** Remove all signs upon completion of project. Repair any damages caused by sign mounting and removal.

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

DEPARTMENT OF HEALTH
ILLEGAL DUMPING NOTICE

The law requires you to dispose solid waste only at recycling or disposal facilities permitted by the Department of Health.

“Solid waste” includes municipal refuse, construction and demolition waste, household waste, tires, car batteries, derelict vehicles, green wastes, furniture, and appliances.

**Illegal dumping of solid waste
or allowing illegal disposal of solid waste on your property even if contractual or other arrangements
are made could subject you to fines from \$10,000 to \$25,000 per occurrence
and could lead to felony prosecution
in accordance with Chapter 342H, HRS.**

**Contact the Department of Health,
Solid Waste Section at 586-4226
to report illegal dumping activities
or if you have further questions.**

A.0.2.8 EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes general procedural requirements governing execution of the Work including the following:
1. Construction layout. Field engineering and surveying.
 2. General installation of products.
 3. Progress cleaning.
 4. Starting and adjusting.
 5. Protection of installed construction.
 6. Correction of the Work.
- B. Related Sections
1. CLOSEOUT PROCEDURES.

1.02 SUBMITTALS

- A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept asbestos waste for disposal.

1.03 NOTIFICATION

- A. Contact the HIENG-DR and the Project Contact Person at least 3 working days prior to starting any onsite work.

1.04 PROJECT AND SITE CONDITIONS

- A. Project Contract Limits (Contract Zone Limits) indicate only in general the limits of the work involved. Perform necessary and incidental work, which may fall outside of these demarcation lines. Confine construction activities within the Project Contract Limits and do not spread equipment and materials indiscriminately about the area.
- B. Disruption of Utility Services: Prearrange work related to the temporary disconnection of electrical and other utility systems with the Project Contact Person listed in SPECIAL CONDITIONS and the HIENG-DR. Unless a longer notification period is required elsewhere in the Contract Documents, notify the HIENG-DR at least 15 days in advance of any interruption of existing utility service. Time and duration of interruptions are subject to the HIENG-DR's approval. Keep the utility interruptions and duration to a minimum so as not to cause inconvenience or hardship to the facility. If temporary electrical or other

utility systems hook-up is required, provide the necessary services. Pay for temporary services as part of the contract, unless specifically noted otherwise.

- D. Contractor's Operations - Provide means and methods to execute the Work and minimize interruption or interference to the facility's operations. Rearrange the construction schedule when construction activities result in interruptions that hamper the operations of the facilities.
- E. Maintain safe passageway to and from the facility's occupied buildings, rooms and other occupied spaces for the using agency personnel and the public at all times.
- F. Contractor, Subcontractor(s) and their employees will not be allowed to park in zones assigned to Users or facility personnel. Subject to availability, the HIENG-DR may designate areas outside of the Contract Zone Limits to be used by the Contractor. Restore any lawn area damaged by construction activities.

1.05 QUALITY ASSURANCE

- A. Land Surveyor Qualifications: A professional land surveyor with a license to practice in Hawaii.
- B. Professional Engineer Qualifications: A professional engineer with a license to practice in Hawaii.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 EXAMINING THE SITE

- A. Contractor and Subcontractors are expected to visit the site and make due allowances for difficulties and contingencies to be encountered. Compare contract documents with work in place. Become familiar, with existing conditions, the conditions to be encountered in performing the Work, and the requirements of the drawings and specifications.
- B. Verify construction lines, grades, dimensions and elevations indicated on the drawings before any clearing, excavation or construction begins. Bring any discrepancy to the attention of the HIENG-DR, and make any change in accordance with the HIENG-DR instruction.
- C. Obtain all field measurements required for the accurate installation of the Work included in this Contract. Verify governing dimensions and examine adjoining work on which the Contractor or Subcontractor's work is in any way dependent. Submit differences discovered during the verification work to the HIENG-DR for interpretations before proceeding with the associated work. Exact measurements are the Contractor's responsibility.
- D. Furnish or obtain templates, patterns, and setting instructions as required for the installation of all Work. Verify dimensions in the field.
- E. Contractor shall accept the site in the condition that exists at the time access is granted to begin the Work. Verify existing conditions and dimensions shown and other dimensions not indicated but necessary to accomplish the Work.

- F. Locate all general reference points and take action to prevent their destruction. Lay out work and be responsible for lines, elevations and measurements and the work executed. Exercise precautions to verify figures and conditions shown on drawings before layout of work.

3.02 SITE UTILITIES

- A. Cooperate, coordinate and schedule work to maintain construction progress, and accommodate the operations and work of the owners of underground or overhead utility lines or other property in removing or altering the lines or providing new services.
- B. Should the Contractor discover the existence and location of utilities in the contract drawings are not correct and that are in conflict with the proposed improvements, do not disturb the utilities and immediately notify the HIENG-DR.
- C. Do not disturb or modify any utilities encountered, whether shown or not on the Contract Drawings, unless otherwise instructed in the drawings and specifications or as directed by the HIENG-DR. Repair and restore to pre-damaged condition any utilities or any other property damaged by construction activities.
- D. Transfer to "Field Posted As-Built" drawings the location(s) and depth(s) of new and existing utilities that differ from the Contract Drawings. Locate by azimuth and distance and depth(s) from fixed referenced points.

3.03 FIELD MEASUREMENTS

- A. Take field measurements to align and install the Work properly.
- B. Spacing Requirements: Verify spacing requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Submit a Request For Information (RFI) immediately upon discovery of the need for clarification of the Contract Documents. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.04 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify the HIENG-DR promptly.
- B. General: Engage a licensed land surveyor to lay out the Work using accepted surveying practices.
 - 1. Establish benchmarks, control points, lines and levels at each story or level of construction and elsewhere as needed to locate each element of Project.
 - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.

3. Inform installers of lines and levels to which they must comply.
 4. Check the location, level and plumb, of every major element as the Work progresses.
 5. Notify the HIENG-DR when deviations from required lines and levels exceed allowable tolerances.
 6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including grading, fill and topsoil placement.
- D. Building Lines and Levels: Locate and lay out control lines and levels for headstone alignment. Transfer survey markings and elevations for use with control lines and levels.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include plot number, beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by the HIENG-DR.

3.05 FIELD ENGINEERING

- A. Reference Points: Locate existing permanent or temporary benchmarks, control points and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
1. Do not change or relocate existing benchmarks or control points without the HIENG-DR's approval. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to the HIENG-DR before proceeding.
 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base all replacements on the original survey control points.
- B. Benchmarks: Establish and maintain a minimum of 2 permanent or temporary benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

3.06 INSTALLATION

- A. Install materials, items, fixtures required by the various sections of the Specifications in accordance with Contract Documents, by workers specially trained and skilled in performance of the particular type of work, to meet guarantee and regulatory agency requirements. Should the drawings or specifications

be void of installation requirements, install the materials, items, and fixtures in accordance with the manufacturer's current specifications, recommendations, instructions and directions.

3.07 CUTTING

- A. No cutting of asphalt concrete is anticipated.

3.08 CLEANING

- A. General: Clean the Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste more than 7 days unless approved otherwise by the HIENG-DR.
 - 3. Containerize hazardous waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Headstone Surfaces: Clean surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion. One headstone shall be cleaned to demonstrate the level of cleaning that is required for each headstone to the acceptance of the HIENG-DR. Cleaning substances shall not damage the existing surface.
- E. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- F. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- G. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.
- H. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.09 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

3.10 CORRECTION OF THE WORK

- A. Repair, replace or restore defective construction. Restore damaged headstones. Repairing includes re-grassing defective areas, refinishing damaged headstone surfaces, and touching up with matching materials.
- B. Restore permanent facilities used during construction to their specified condition.

A.0.2.9 CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes administrative and procedural requirements for contract closeout, including the following:

1. Project Record Documents.

B. Related documents include the following:

1. EXECUTION REQUIREMENTS.

1.02 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting a Final Inspection to determine Substantial Completion, complete the following items in addition to requirements of the GENERAL CONDITIONS.

1. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
2. Complete final cleaning requirements.
3. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
4. Ensure that all markers are correctly located horizontally and vertically per plan.
5. Ensure that the grading promotes positive drainage and there are no ponding areas.

1.03 FINAL COMPLETION

A. Preliminary Procedures: Within 10 days from the Project Acceptance Date, complete the requirements of GENERAL CONDITIONS, PROSECUTION AND PROGRESS.

1.04 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit 2 copies of any updated and action taken list. In addition to requirements of GENERAL CONDITIONS, PROSECUTION AND PROGRESS, include identification of each area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Include the following information at the top of each page:
 - a. Project Name and Title.
 - b. Job No.
 - c. Date and page number.
 - d. Name of Contractor.

1.05 PROJECT RECORD DOCUMENTS AND REQUIREMENTS

A. General:

1. Definition: "Project Record Documents", including Record Drawings, shall fulfill the requirements of "Field-Posted As-Built Drawings" listed in the GENERAL CONDITIONS.
2. Do not use Project Record Documents for daily construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for HIENG-DR's reference during normal working hours. Maintain these documents as specified in paragraph entitled "Record Drawings" hereinafter.
3. The Designer, under contract with the State, will update the drawings to show all addendum, PCD, and sketch changes. The HIENG-DR will transmit these drawings to the Contractor who will make all "red-line" corrections to these drawings to record the changes depicted on the Contractor's Field Posted Record ("As-Builts") by accepted drafting practices as approved by the HIENG-DR. The "red-line" drawings shall be clear and no interpretation should be required.
4. Where the recorded changes depicted on the Contractor's Field Posted Record ("As-Builts") are in the form of shop drawings, the Contractor shall provide those shop drawings in the same material and size as the drawings transmitted to the Contractor. The new drawing sheets shall be titled and numbered to conform to the construction drawings and clearly indicate what information they supersede in the actual construction drawings. For example a new drawing that replaces drawing M-3, could be numbered M-3a.
5. The Contractor shall bring to the attention of the HIENG-DR any discrepancy between the changes made by the Designer and those depicted on addendum, PCD, and sketch changes. The HIENG-DR will resolve any conflicts.
6. Submit final Record Documents (Field Posted Record Drawings) within 10 days after the Final Inspection Date but no later than the Contract Completion Date, unless the GENERAL CONDITIONS require an earlier submittal date.
7. The Contractor shall guarantee the accuracy of its final Record Documents. The State will hold the Contractor liable for costs the State incurs as a result of inaccuracies in the Contractor's Record Documents.
8. Prepare and submit construction photographs and electronic files, damage or settlement surveys, property surveys, and similar final record information as required by the HIENG-DR.

B. Record Drawings:

1. Maintain a duplicate full-size set of Field Posted Record ("As-Builts") Drawings at the job site. Clearly and accurately record all deviations from alignments, elevations and dimensions, which are stipulated on the drawings and for changes directed by the HIENG-DR that deviate from the drawings.
2. Record changes immediately after they are constructed in place and where applicable, refer to the authorizing document (Field Order, Change Order, or Contract Modification). Use red pencil to

record changes. Make Field Posted Record Drawings available to the HIENG-DR at any time so that its clarity and accuracy can be monitored.

- a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - d. Mark the contract drawings or the shop drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on contract drawings.
 - e. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - f. Locate site utilities found by dimensions, azimuth and lengths from bench marks or permanent structures.
 - g. Note field order numbers, Change Order numbers, Contract Modification numbers, Alternate numbers, post-construction drawing numbers (PCD) and similar identification (RFI numbers) where applicable.
 - h. The Contractor shall initial each deviation and each revision marking.
3. Use the final updated Contract Drawing set plus applicable shop drawings for making the final Field Posted Record Drawings submittal.
 4. Certify drawing accuracy and completeness. Label and sign the record drawings.
 5. Label the title sheet and on all sheets in the margin space to the right of the sheet number, written from the bottom upward, with the title "FIELD POSTED RECORD DRAWINGS" and certification information as shown below. Provide a signature line and company name line for each subcontractor that will also certify the respective drawing. Adjust size to fit margin space.

FIELD POSTED Certified By: _____ Date: _____
RECORD DRAWINGS [Contractor's Company Name]

6. Revise the Drawing Index and label the set "FIELD POSTED RECORD DRAWINGS". Include the label "A COMPLETE SET CONTAINS [_____] SHEETS" in the margin at the bottom right corner of each sheet. Quantify the total number of sheets comprising the set.
7. If the HIENG-DR determines a drawing does not accurately record a deviation or omits relevant information, the State will correct any FIELD POSTED RECORD DRAWINGS sheet. Contractor will be charged for the State's cost to correct the error or omission.
8. Use the final Field Posted Record Drawings sheets to create one electronic version of the set. The set shall be recorded in Adobe Acrobat PDF (Portable Document Format). Create a single indexed, bookmarked PDF file of the entire set of drawings and record on the CD. Submit one set of the final Field Posted Record Drawings sheets and the complete electronic CD set(s).

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.01 FINAL [PROGRESSIVE] CLEANING

- A. General: Provide final cleaning for each phase of work prior to starting the next phase. In addition to requirements of GENERAL CONDITIONS conduct cleaning and waste-removal operations to comply with local laws and ordinances and federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers for final cleaning. Clean each surface or unit to condition expected in an average maintenance program. Comply with manufacturers written instructions unless noted otherwise. Complete the following cleaning operations before requesting final inspection for entire Project or for a portion of Project:
 1. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits resulting from construction activities.
 3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 4. Remove tools, construction equipment, machinery, and surplus material from Project site.
 5. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 6. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 7. Leave Project clean and ready for use.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the State's property. Do not discharge volatile, harmful, or dangerous materials into drainage and sewer systems or onto State property. Remove waste materials from Project site and dispose of lawfully.

A.1.0 DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

A.1.1 NCA MISSION

The National Cemetery Administration honors veterans with a final resting place and lasting memorials that commemorate their service to our Nation. State and Tribal Government Veterans cemeteries are national shrines. The standards of maintenance, appearance and operational procedures performed by the Contractor at this cemetery shall reflect this nation's concern for those interned there. For this reason, the Contractor's strict adherence to the specifications shall be required and shall be essential.

A.1.2 SCOPE OF WORK

- A. Contractor shall furnish all equipment, parts, materials, supplies, labor and supervision necessary and incidental to the raising, realigning, resetting, cleaning of markers (a.k.a. grave markers or headstones), and re-grassing, , installation of root barrier at the Maui Veterans Cemetery (MVC).
- B. Work for this project shall be performed in strict accordance with all terms, conditions, specifications, schedules and drawings. In conjunction with raising, realigning, and resetting each grave marker, the Contractor is required to remove each marker and modify marker sockets to meet specifications provided.
- C. One of the most important considerations in erecting or emplacing a marker is that of precision in alignment. Much of the beauty that exists or should exist in a national cemetery is the direct result of perfectly aligned markers. It only takes one marker out of alignment to spoil the appearance of an entire row, and thereby, the appearance of the entire section. The appearance of the finished work shall be gravesite section(s) that are contoured grass landscape and markers aligned with each other in vertical, horizontal, lateral, and diagonal directions within the tolerances specified herein. It is critical that existing conditions are surveyed and contours adjusted as necessary and approved by the State of Hawaii, Department of Defense, Engineering Office Designated Representative (HIENG-DR) to produce such an appearance. Failure to achieve this finished work shall be basis for accepting or not accepting the finished work.
- D. Visits to the site by Bidders may be made only by appointment with the HIENG-DR or authorized designee of the MVC.

A.1.3 ADDITIONAL COPIES OF SPECIFICATIONS AND DRAWINGS

Upon request, two (2) additional sets of specifications and drawings will be provided to the Contractor at time of award.

A.1.4 FIRE SAFETY

- A. Applicable Publications: Publications listed below form part of this Article to extent referenced. Publications are referenced in text by basic designations only.
 - (i) American Society for Testing and Materials (ASTM):
E84-1998.....Surface Burning Characteristics of Building Materials
 - (ii) National Fire Protection Association (NFPA):

- 10-1998.....Standard for Portable Fire Extinguishers
- FCLCH-30-1996.....Flammable and Combustible Liquids Code
- 51B-1999.....Standard for Fire Prevention During Welding, Cutting and Other Hot Work
- 70-1999.....National Electrical Code
- 241-1996.....Standard for Safeguarding Construction, Alteration, and Demolition Operations

(iii) Occupational Safety and Health Administration (OSHA)
29 CFR 1926.....Safety and Health Regulations for Construction

- B. Fire Safety Plan: Establish and maintain a fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to HIENG-DR for review.
- C. Site and Building Access: Maintain free and unobstructed access to facility emergency services and for fire, police and other emergency response forces in accordance with NFPA 241.
- D. Facilities: Separate temporary facilities, such as trailers, storage sheds, and dumpsters, from existing buildings and new construction by distances in accordance with NFPA 241. For small facilities with less than 6 m (20 feet) exposing overall length, separate by 3m (10 feet). Onsite staging area to be defined by HIENG-DR after Award.
- E. Temporary Electrical: Install, use and maintain installations in accordance with 29 CFR 1926, NFPA 241 and NFPA 70. If temporary electrical is required, the Contractor shall notify the HIENG-DR prior to use of Temporary Electrical Services.
- F. Means of Egress: Do not block exits of occupied buildings, including paths from exits to roads.
- G. Fire Extinguishers: Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with 29 CFR 1926, NFPA 241 and NFPA 10.
- H. Flammable and Combustible Liquids: Store, dispense and use liquids in accordance with 29 CFR 1926, NFPA 241 and NFPA 30.
- I. Smoking: Smoking is prohibited except in designated smoking rest areas.

A.1.5 OPERATIONS AND STORAGE AREAS

- A. Coordination of Work with HIENG-DR or Authorized Designee: The burial activities and other interment services at a Cemetery shall take precedence over construction activities. Construction noise during the interment services cannot disturb the burial service. To cause the least possible interference with cemetery activities, the Contractor will cease all work in areas where burials are taking place. Trucks and workmen are prohibited from passing through the service area during this period.
- B. The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the HIENG-DR. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature resulting from

the Contractor's performance and/or negligence. It is understood that the Veterans Affairs (VA) and HIENG-DR shall not be held responsible for any damage to the Contractor's equipment, materials, supplies or the like which may result from vandalism, theft etc. while on site.

- C. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the HIENG-DR and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed and the area restored by the Contractor at its own expense upon completion of the work.
- D. The Contractor shall, under regulations prescribed by the HIENG-DR, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the HIENG-DR.

When materials are transported in performance of work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

- E. The HIENG-DR shall designate working space and space available for storing materials within the existing cemetery area. Unless otherwise indicated on drawings as the Contractor's "Staging Area", all working and storage space must be approved by the HIENG-DR prior to its use.
- F. Contract personnel are subject to the Cemetery rules of conduct. In addition to items listed elsewhere in this contract, the Contractor is responsible for ensuring that no contract work causes any committal service, ceremony, procession or visitation to be delayed, altered, or otherwise impacted in such a way that the dignity, security, or safety of the event or visit is compromised.
- G. Contractor shall execute work in such a manner as to interfere as little as possible with work being done by others. Keep roads clear of construction materials, debris, standing construction equipment and vehicles at all times. Materials and Equipment shall not be stored in other than assigned areas.
- H. The Government is not liable for theft or damage to Contractor's property regardless if it is stored in a fenced enclosure or not.

A.1.6 INTERRUPTION OF UTILITY SERVICES

- A. No utility services such as water, gas, steam, sewers or electricity, or fire protection systems and communications systems may be interrupted without prior approval of the HIENG-DR.
- B. Contractor shall submit a request to interrupt any such services to HIENG-DR, in writing, 48 hours in advance of proposed interruption. Request shall state reason, date, exact time of, and approximate duration of such interruption.
- C. Contractor will be advised (in writing) of approval of request, or of which other date and/or time such interruption will cause least inconvenience to operations of Cemetery. Interruption time approved by the cemetery may occur at other than Contractor's normal working hours.

- D. To minimize interference of construction activities with flow of Cemetery traffic, the Contractor is to keep roads, walks and entrances to grounds, to parking and to occupied areas of buildings clear of materials, debris and standing construction equipment and vehicles. At least one lane must be open to traffic at all times.

A.1.7 SITE INSPECTION

- A. Survey: Before any work is started, the Contractor shall conduct a thorough survey with the HIENG-DR of areas in which alterations occur, and areas that are anticipated routes of access. The Contractor shall submit a report to the HIENG-DR, signed by the Contractor. This report shall list existing conditions at site. Use of a video camera to survey and document existing conditions is encouraged.
- B. Resurvey: Thirty days (30) before expected final inspection date, the Contractor and HIENG-DR together shall make a thorough re-survey of the areas of burial sections involved. The re-survey report shall list any damages caused by Contractor's workmen in executing work under this contract.

A.1.8 PROTECTION OF EXISTING VEGETATION, GRASS, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS

- A. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which is not to be removed and which does not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so by the HIENG-DR, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance or by the careless operation of equipment by workmen, the Contractor shall trim those limbs or branches with a clean cut, remove, and properly dispose of from the site as defined herein.

Contractor must notify HIENG-DR of tree-root-bound markers. The HIENG-DR will make the determination to reset or leave these markers in place. The Contractor must contact the HIENG-DR during adverse weather conditions as to not cause any undue tracking or rutting of turf. If these situations occur, the complete renovation of these areas will be at the expense of the Contractor.

- B. The Contractor shall protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party. The Contractor shall immediately notify the HIENG-DR of any such occurrence and repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the HIENG-DR may have the necessary work performed and charge the cost to the Contractor.
- C. Refer to Articles, "Site Inspection", "Restoration", and "Operations and Storage Areas" for additional instructions concerning repair of damage to structures and site improvements.

A.1.9 RESTORATION

- A. Contractor shall remove, cut, alter, replace, patch and repair existing work as necessary to complete the scope of work. Except as otherwise shown or specified, Contractor shall not disturb any water, steam, gas, or electric services without prior approval of the HIENG-DR. Existing work to be altered or extended that is found to be defective in any way, shall be reported to the HIENG-DR before it is disturbed. Materials and workmanship used in restoring work shall conform in type and quality to that of original construction, except as otherwise shown or specified.
- B. Upon completion of contract, deliver work complete and undamaged. Existing work (lawns, paving, roads, walks, etc.) disturbed or removed as a result of performing required new work, shall be patched, repaired, reinstalled, or replaced with new work, and refinished and left in as good condition as existed before commencing work. Valve boxes shall be re-bricked and not resting on piping. All restoration work shall be accomplished without undue delay.
- C. The Contractor, at its own expense, shall immediately restore to service and repair any damage caused by Contractor's workmen/sub-Contractors to existing piping, conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone - if applicable), to the work performed under this agreement, which are not scheduled for discontinuance or abandonment.
- D. Expense of repairs to such utilities and systems not shown on drawings or locations of which are unknown will be covered by adjustment to contract time and price in accordance with clause entitled "CHANGES" (FAR 52.212-4 and VAAR 852.236-88) and "DIFFERING SITE CONDITIONS" (FAR 52.236-2).

A.1.10 PROFESSIONAL SURVEYING SERVICES

A registered professional land surveyor or registered civil engineer whose services are retained and paid for by the Contractor shall be used to restore any grave section corner monuments and any terra cotta gravesite control markers or monuments that may be disturbed as a result of the Contractor's work performance. Those that may be missing or destroyed because of the Contractor's work performance must also be replaced.

A.1.11 LAYOUT OF WORK

- A. The Contractor shall complete the project in three (3) phases, as shown on the project plans, starting with Phase 1 and ending with Phase 3. Changes or modifications to these phases must be approved by the HIENG-DR.
- B. The Contractor shall layout the work and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at Contractor's own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to layout any part of the work. The Contractor shall be responsible for executing the work to the lines and grades needed to accomplish the work and to ensure that grave markers are correctly and accurately located on their associated gravesites.

- C. The Contractor shall also be responsible for maintaining and preserving all temporary and permanent stakes, plot/section markers (permanent and existing), and other marks until authorized by the HIENG-DR to remove them; any items removed shall be reinstalled in their original location and condition. If such marks are destroyed by the Contractor or through Contractor's negligence before their removal is authorized, the HIENG-DR may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

A.1.12 AS-BUILT DRAWINGS

- A. The Contractor shall maintain one set of as-built drawings, which will be kept current during performance of the project, to include all contract changes, modifications, and indicating work progress on a section-by-section basis.
- B. Contractor shall provide photographs of all markers with 2 or a maximum of 3 in each picture before any work is started. These photographs shall be labeled as "Before" for each burial section and catalogued to correspond with the existing layout or placement of each markers within its corresponding burial section. Contractor shall also provide photographs labeled as "After" to correspond with each "Before" photo for each burial section once work is complete. Survey data for monuments and markers must be provided along with pictures for closeout.
- C. Contractor shall deliver one set of as-built drawings to the HIENG-DR within 15 calendar days after acceptance of the project by the HIENG-DR.

A.1.13 USE OF ROADWAYS

For hauling, use only established public roads and roads on Cemetery property and, when authorized by the HIENG-DR, such temporary roads which are necessary in the performance of contract work. Temporary roads shall be constructed by the Contractor at Contractor's expense. When necessary to cross curbing, sidewalks, or similar construction, must be protected by well-constructed bridges. Mud and other debris generated by the Contractors performance on this contract shall be cleaned up and removed by C.O.B. as per specifications section A.2.4E.

A.1.14 NOT USED

A.1.15 USE OF WATER

- A. The Contractor shall regularly water the new grass areas during installation, without wasting water by overwatering, as determined by the HIENG-DR. All new grass areas established by the Contractor shall be irrigated and maintained by the Contractor until acceptance is made by the HIENG-DR.
- B. The Contractor is responsible for coordinating and paying for all water used for construction, as well as, establishment and maintenance of new grass areas. The Contractor shall install all required backflow prevention and metering devices.
- C. Requests to irrigate newly planted turf, to include amount and frequency, shall be made to and approved by the HIENG-DR. Access to and programming of the irrigation control boxes (if available) shall be performed by cemetery personnel at the direction of the HIENG-DR. The

Contractor shall not manually override any electronic irrigation control system unless specifically authorized to do so by the HIENG-DR.

- D. The Contractor shall provide a temporary irrigation system for all new grass areas for the duration of the project if a no existing irrigation system is available for the Contractor's use.
- E. The Contractor will be permitted to use the hose bibs and fire hydrants that are available at this cemetery with written approval from the HIENG-DR.
- F. Water shall also be used as the primary method of dust control.

A.1.16 HISTORIC PRESERVATION

Where the Contractor or any of the Contractor's employees, prior to, or during the construction work, are advised of or discover any possible archeological, historical and/or cultural resources, the Contractor shall immediately stop work, verbally notify the HIENG-DR, and then follow up with a written memorandum detailing all specifics to the HIENG-DR.

A.1.17 REPORTING REQUIREMENTS

The Contractor shall be required to report to HIENG-DR on a daily basis by phone (or as otherwise agreed upon with the HIENG-DR). Contractor shall check-in and obtain funeral and/or special schedules from the HIENG-DR as defined herein. This daily check-in is mandatory. The Contractor shall provide an anticipated work schedule on a daily basis or as agreed upon with the HIENG-DR. The Contractor shall document services performed and provide information to the HIENG-DR as required during specific periods.

A. Points Of Contact (MVC Designee):

Highways Superintendent
County of Maui
1827 Kaohu Street
Wailuku, HI 96793

Phone: (808) 270-7869 **EMAIL:** (Request from HIENG-DR)

B. Points Of Contact (Acting Contracting Officer):

Lloyd Maki, RA, Acting Chief Engineering Officer, Acting Contracting Officer
Engineering Office, Department of Defense, State of Hawaii
3949 Diamond Head Road, Room 226
Honolulu, HI 96816-4495

Phone: (808) 733-4250 **EMAIL:** lmaki@dod.hawaii.gov

C. Points Of Contact (Contracts Assistant):

Cathy Siu, Contracts Assistant
Engineering Office, Department of Defense, State of Hawaii
3949 Diamond Head Road, Room 226
Honolulu, HI 96816-4495

Phone: (808) 733-4250 **EMAIL:** csiu@dod.hawaii.gov

D. Points Of Contact (HIENG-DR):

Reggie Yamada
Engineering Office, Department of Defense, State of Hawaii
3949 Diamond Head Road, Room 226
Honolulu, HI 96816-4495
Phone: (808) 733-4250 **EMAIL:** ryamada@dod.hawaii.gov

E. Points Of Contact (DESIGN):

Diane Kodama
AECOM Technical Services, Inc.
1001 Bishop Street, Suite 1600
Honolulu, HI 96813
Phone: (808) 529-7226 **EMAIL:** diane.kodama@aecom.com

F. Points Of Contact (for Contractor – please indicate):

_____ Tele # : () _____ - _____
(Name & Title)

Fax # : () _____ - _____

E-Mail: _____

_____ Tele # : () _____ - _____
(Name & Title – Alternate POC)

E-Mail: _____

Note: If work is authorized to be performed after hours or on weekends / holidays, and an emergency occurs, the Contractor shall contact the Maui Police Department in the absence of the HIENG-DR's or Acting Director. The Maui Police Department Officer will then contact the Cemetery management or take appropriate action.

A.1.18 IDENTIFICATION, PARKING, SMOKING, AND VA REGULATIONS

- A. All Contractor and his/her employees will be required to adhere to MVC's Security Policy and meet with any MVC point of contact-designated staff. It is the responsibility of the Contractor to park in the appropriate designated parking areas. The Cemetery will not invalidate or make reimbursement for parking violations of the Contractor under any conditions.
- B. Smoking is prohibited inside any buildings at the Cemetery. Possession of weapons is prohibited. Enclosed containers, including tool kits, shall be subject to search. Violations of VA regulations may result in citation answerable in the United States (Federal) District Court, not a local district, state, or municipal court.

A.1.19 INSURANCE – WORK ON A GOVERNMENT INSTALLATION

- A. The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.
- B. Before commencing work under this contract, the Contractor shall notify the HIENG-DR in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective-
 - 1. For such period as the laws of the State in which this contract is to be performed prescribe; or
 - 2. Until 30 days after the insurer or the Contractor gives written notice to the HIENG-DR, whichever period is longer.
- C. The Contractor shall insert the substance of this clause, including this paragraph C., in subcontracts under this contract that require work on a Government installation and shall require sub-Contractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all sub-Contractors' proofs of required insurance, and shall make copies available to the HIENG-DR upon request.
- D. Schedule of insurance coverage: The following minimum coverage shall apply to this contract –
 - 1. *Workers' compensation and employer's liability.* Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a Contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least **\$100,000** shall be required, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.
 - 2. *General liability.* Bodily injury liability insurance coverage written on the comprehensive form of policy of at least **\$500,000** per occurrence.
 - 3. *Automobile liability.* The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least **\$250,000** per person and **\$500,000** per occurrence for bodily injury and **\$100,000** per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

A.1.20 ORIENTATION FOR CONTRACTOR EMPLOYEES

- A. Contractor will attend an orientation meeting as arranged by the HIENG-DR. The HIENG-DR will schedule this meeting and it will include discussion of the following topics (HIENG-DR will provide information to the Contractor regarding these topics and will document the meeting):
 - 1. Fire and Safety
 - 2. Project Work Schedule, Rules Pertaining To Workers, General Parameter Job Related Issues
 - 3. Disaster procedures
 - 4. Other

- B. The Contractor will be responsible to ensure that Contractor employees coming to the work site will receive the information required above.

- C. The Contractor will be responsible to ensure Contractor employees providing work on this contract are fully trained and completely competent to perform the required work.

A.2.0 SPECIFIC REQUIREMENTS

A.2.1 CONTRACTOR DUTIES AND RESPONSIBILITIES

- A. Project Manager: A competent and experienced "Project Manager" shall be provided by the Contractor for not less than two (2) hours per day whenever work is being performed - other than trash and debris pick-up. In the absence of the Project Manager, the Contractor will appoint a crew foreman or employee who will be responsible to insure that the work is (i) being accomplished in an expeditious manner, (ii) performed in accordance with the contract specifications, and (iii) progress is being made without undue delay. The Project Manager must have no less than two (2) years' experience as a direct supervisor of a commercial construction operation that includes surveying, soil excavation, and site construction in industrial, commercial and/or public sites. The Project Manager will ensure all specifications are being met, ensure contract work does not conflict with ceremonies and funerals, and ensure employees are adequately supervised and proper conduct is maintained. **BOTH PROJECT MANAGER AND CREW FOREMAN ARE REQUIRED TO BE FLUENT IN ENGLISH.**
- B. Period of Performance: The Contractor shall complete all work defined herein within 1 calendar year from start to finish. Construction Notice to Proceed (NTP) shall be given within the stated 1 calendar year.
- C. Turf Establishment Watering: At present, there is no active irrigation system at this site to establish turf; however there are hose bib connections available in the cemetery and current maintenance personnel may use their own irrigation equipment. Current maintenance personnel believes that the geographical location of this site is conducive with sufficient rainfall to maintain healthy turf and use lawn sprinklers when necessary during dry periods. This statement does not absolve the Contractor from his requirement to provide temporary watering as needed to produce healthy turf. The Contractor will be required to coordinate and oversee all work to ensure that his efforts are actually producing healthy turf. All existing irrigation equipment shall remain and be protected throughout construction and maintain all vegetation (including trees) until the end of the project. Contractor shall replace all irrigation equipment damaged by construction operations with exact manufacturer and model originally installed or accepted by the HIENG-DR at no additional cost. Contractor shall provide a temporary irrigation system for new planting areas. The temporary irrigation system shall consist of commercial-quality equipment and products and shall be maintained by the Contractor throughout the maintenance period. The Contractor shall pay for all water used for construction, including a County approved water meter and reduced pressure backflow preventer. The Contractor's irrigation system (including all pipes, connections, hoses, etc.) shall be secured and protected from vehicles and pedestrians.

Work may be performed between the hours of 7:00 a.m. to 4:00 p.m. PDT, Monday through Friday unless otherwise directed by the HIENG-DR. At the Contractor's request, and with the written permission of the HIENG-DR, work may also be permitted to be scheduled for weekends and/or Holidays except Veterans Day and Memorial Day. In emergency situations caused by the Contractor, or when severe adverse weather prohibits work during the week, the Contractor shall arrange with the HIENG-DR to work on weekends and/or holidays in order to meet performance time frames. The Government shall not compensate the Contractor for any alternate work schedules needed for the Contractor to complete all contract work within the specified project duration. No work will be permitted during Memorial Day or Veteran's Day weekend activities. Notwithstanding, if any work under this contract will be required outside of the VA's normal working

hours (7:00 a.m. to 4:00 p.m. PDT, Monday through Friday), the Contractor shall request for a deviation in writing to the HIENG-DR at least 24 hours in advance. The HIENG-DR will notify the appropriate individuals regarding Contractor's anticipated schedule and will provide written approval or disapproval to the Contractor.

- D. After Normal Hours On-Call / Emergency Situations: The Contractor shall establish and maintain a point-of-contact to receive emergency calls from the HIENG-DR(s). The point-of-contact shall be available on a 24-hour basis including during weekends, Federal Holidays and after normal hours of operation. The Contractor is to provide phone, pager and cell phone numbers for emergency and/or after hour's situations.

Repairs shall be made as expeditiously as circumstances allow or within (24) hours upon initial emergency call. Contractor shall follow procedures listed in paragraph A.1.17 for emergency notifications.

- E. Daily Work Schedule: As provided under paragraph A.1.17, the Contractor shall coordinate with the HIENG-DR(s) on a daily basis a work schedule to ensure that no work is being performed at the immediate site of a scheduled interment or ceremony. These daily meetings are also an opportunity for the Contractor to ask questions and ensure he/she understands the off-limit areas, which may vary, depending on the event.

The Project Manager can thus assign tasks accordingly throughout the rest of the Cemetery - so that productive use of labor and equipment is assured, and downtime is avoided. If the Contractor fails to re-direct employees away from an event in a timely fashion, the HIENG-DR(s) may then assist in doing so. **At the Government's discretion, daily or weekly meetings shall be conducted at a time agreed upon by both the HIENG-DR and the Contractor.**

- F. Phasing Schedule: Contractor shall post his estimated phasing schedule in a visible area in the existing communal shelter, cemetery entrance, or HIENG-DR-approved location prior to starting construction and update frequently. Phasing schedule shall be posted and remain posted in an obvious, informational, legible, and non-obstructing manner approved by the HIENG-DR until the project is completed.
- G. Scheduled Ceremonies: In the event that a burial or funeral is scheduled for the cemetery, the Contractor will obtain a list of scheduled ceremonies the week prior to the event, and a list of scheduled funerals will be provided daily upon request from the Contractor. The Contractor shall ensure that no contract work causes any funeral, ceremony, procession or visitation to be delayed, altered, or otherwise impacted in such a way that the dignity or security of the event is compromised. The Contractor shall stay abreast of all such upcoming events and when in doubt, he/she shall ask the HIENG-DR(s). The Contractor shall meet with the HIENG-DR at the end of each day to determine work completed and ensure that work is on schedule. In the absence of the HIENG-DR, the Contractor shall meet with CM of this contract as provided under Paragraph A.1.17.
- H. The Contractor's performance and progress on this contract will be measured weekly based on how timely, accurately, and adequately he/she accomplishes and completes weekly work schedules necessary to systematically accomplish the contract work over the duration of the project. In instances where the HIENG-DR determines that the work is behind schedule, he will notify the Contracting Officer and the Contractor shall increase workforce and/or hours of operation at no

additional cost to the Government in order to achieve completion of the contract work within the specified timeframe.

- I. Adequate warning devices, barricades, guards, flagmen or other necessary precautions shall be provided by the Contractor at all work sites to eliminate hazards and for the protection, safety, and warning of all public visitors, pedestrians, cemetery employees, and vehicular traffic within the area. All open and unattended holes in the ground must be covered with plywood and/or barricaded for pedestrian safety. All irrigation system equipment and materials shall be secured and protected from vehicles and pedestrians. **The Contractor shall place at least one 2' high x 2' wide temporary plastic placard warning sign in front of each and every burial plot or section where work is occurring stating "Burial Section Renovations in Progress, Please Pardon Our Dust". The Contractor shall also place at least one 2' high x 2' wide temporary plastic placard sign in front of each and every plot/burial section where grass is in establishment reading "Area Temporarily Closed for Grass Establishment, Caution: Wet Ground".**

A.2.2 REQUIRED DOCUMENTATION

The Contractor shall be responsible for obtaining all necessary and current licenses, permits, vehicular insurance and registration, Workman's Compensatory Liability Insurance, property liability insurance etc., prior to the commencement of work. The Contractor shall provide the HIENG-DR copies of these required documents with his/her proposal and at other times where the HIENG-DR deems necessary during the duration of the project.

A.2.3 UTILITY LINES COMPLIANCE

Where work conflicts with existing utility/service lines (above ground/below ground), the corresponding utilities company and the HIENG-DR shall be notified and the Contractor shall obtain any necessary permits/ blue prints and cooperate with the utilities company/cemetery staff to avoid any damage or liability, and provide a safe work environment for his/her employees. Contractor is responsible for damages to utilities, above and below ground.

A.2.4 GENERAL PARAMETERS

- A. If there exists any conflicting information, rules, regulations, standards, etc. between these Specifications and the Construction Plans, the more stringent shall govern.
- B. The Contractor is responsible to ensure that all work shall be done in a manner that safeguards all MVC visitors, employees, and public. The Contractor shall be solely responsible for any and all actions initiated and/or completed by his/her employees. Furthermore, the Contractor and his/her employees shall have a clear understanding of, and be sensitive to, such environmental issues as ground water contamination, wetlands, etc., and be consistent and fully compliant with all applicable Federal, State, County laws, ordinances, Right-to-Know laws, EPA guidelines, and regulations.
- C. Damage to Government property: Contractors shall be responsible for replacement of any cemetery structure, to include: turf, curb, road pavement, marker, permanent floral vases, flag sockets, valve boxes, control markers etc., which are chipped, marred, damaged and/or ruined at the fault of the Contractor and shall bear all costs associated with replacement and reinstallation. Any such damage shall be brought to the immediate attention of the appointed HIENG-DR prior to repair, replacement, and installation.

- D. Liability: At the Government's discretion, the Contractor shall either repair or replace the property, or reimburse the Government the full amount for all property damage(s). The Contractor shall be aware that Government property - beyond standard structures and equipment - also includes markers, monuments, trees, plant beds, and turf, i.e. wounded trees or scalped turf, etc. - as well as markers - shall be repaired or replaced.
- E. Contractors shall be responsible for cleaning cemetery structures, markers, monuments, and roadways that are soiled or stained because of Contractor's performance. The Contractor shall wash-down with water all soiled or stained structures, markers, and monuments at the end of each workday.
- F. Roadways shall be cleaned each day as needed to keep the existing roads free from dirt and mud resulting from Contractor operations. No hazardous chemicals are to be used at any time on Government property. The Contractor shall bear all costs associated with washing and cleaning. Any such washing/cleaning shall be brought to the immediate attention of the HIENG-DR prior to washing/cleaning. If any of the Contractor or Contractor employee vehicles leak lubricants, oil, hydraulic, power-steering, or transmission fluids onto the cemetery pavements, the Contractor shall clean up the spill. If the Contractor fails to police his leaks, the Government will do so at the Contractor's expense.
- G. At the end of each day, the Contractor shall remove all debris from the cemetery site resulting from the work. The Contractor shall ensure at all times that rubbish and trash generated by the Contractor is kept clear of vehicular and pedestrian traffic throughout the site. The Government shall not provide receptacle(s) for disposal of debris related to this contract. The Contractor will be permitted to place his trash receptacle dumpsters in the HIENG-DR approved "Contractor Staging Area".
- H. Adequate warning devices, barricades, guards, flagmen or other necessary precautions shall be provided by the Contractor at all work sites to eliminate hazards and for the protection, safety, and warning of all public visitors, pedestrians, cemetery employees, and vehicular traffic within the area.
- I. The Government may undertake or award other contracts for additional work at or near the site of work for this contract. The Contractor shall fully cooperate with any other Contractors and with Government employees and shall carefully adapt scheduling and performance of work, and needing any direction, it shall be provided by the HIENG-DR(s).

The Contractor is responsible for reporting to the HIENG-DR(s) any problems or questions that may arise with any other personnel on site during the period of performance of this contract. The Contractor shall not take it upon him or herself to resolve any problems or issues with other on-site Contractors or employees, but rather will leave it to the HIENG-DR(s) to resolve the issue.

- J. The Contractor (including his or her employees, sub-Contractors, consultants or the like) shall not operate trucks, tractors, and other heavy equipment on any turf area except as provided in this contract to perform work or as authorized by the HIENG-DR. For areas where gravesites are located, dump trucks or other vehicles used for hauling dirt shall not weigh more than 12,000 pounds without load; excavators or backhoes shall not weigh more than 18,000 pounds. During inclement weather conditions and until all such conditions dry out, mini excavators or comparable equipment shall not weigh more than 6,500 pounds; compact backhoes or comparable equipment

shall not weigh more than 5,500 pounds; dump trucks or utility vehicles with dumping capabilities shall not weigh more than 11,000 pounds without load. The Contractor is required to repair any damages to existing underground caskets. The Contractor shall not use equipment or machinery whose weight may cause sink holes and/or buried coffins to break, unless authorized by the HIENG-DR. The Contractor will be responsible for repairing turf damage caused by the Contractor's equipment and staff at no additional cost to the government.

A.2.5 WORK ENVIRONMENT

- A. All work under this service contract will be performed primarily out-of-doors and personnel performing these services will be exposed to wind, sun, cold, dampness, frost, fog and rain. These conditions at times may be extreme. The Contractor shall take all necessary precautions to protect his/her employees from the elements to the maximum practicable extent. The Contractor understands that it may be necessary to work throughout all weather conditions and to apply additional labor equipment as necessary to meet deadlines, at no additional cost to the Government.
- B. The Government reserves the right to order the contract work to cease once the surface conditions deteriorate to soggy or muddy conditions. Once the surface reaches this condition, it is non-productive for the Contractor to continue to fulfill the contract. When the Government orders work to stop due to surface conditions, the Contractor may request a time extension to compensate for the number of days lost due to existing conditions.
- C. Due to the sensitive mission of the cemetery, the work could occasionally involve contact with and/or exposure to grieving individuals. Contractor personnel must exercise and exhibit absolute decorum, composure and stability at all times.

A.2.6 CONTRACTOR FURNISHED ITEMS

- A. The Contractor is responsible for supplying all equipment, personnel, tools, supplies and materials necessary to perform the services required by this contract, unless otherwise stated in this contract.
- B. Contractor-furnished items necessary to perform work as required under this contract shall be furnished, maintained and operated by the Contractor and shall be consistent and fully compliant with all applicable OSHA, Federal, State, County laws, ordinances and regulations.
- C. Materials and supplies procured for the performance of the contract by the Contractor shall be consistent and fully compliant with all applicable Federal, State, and County laws, ordinances and regulations.
- D. Contractor staging and storage areas will be located where shown on the drawings and/or where approved by the HIENG-DR. Contractor may, with HIENG-DR approval, install a 6' high chain link fence with gates around these areas for duration of the project. Contractor shall base operations out of this staging area, using it for materials and equipment storage, administration, employee toilets, trash dumpster area, employee parking, employee lunch/break area, etc. After completion of project work, Contractor is to remove fencing and restore areas back to original condition.
- E. The Contractor is responsible for the supply, maintenance and repair of all Contractor-owned equipment. This includes, minor maintenance/repair and minor operating parts for equipment such as lubrication, oil changes, spark plugs, gaskets, cotter pins/keys, electric extension cords, etc., to

keep all equipment in good operational condition throughout the period of performance of this contract.

- F. The Contractor is responsible for ensuring that all of its motor vehicles and equipment meet State inspection, safety, licensing, registration, and insurance requirements.
- G. Electricity: In case the Contractor requires electricity while in performance of this contract, the Contractor shall provide and utilize portable generators as necessary to complete the work. If Contractor hookup to MVC's electrical distribution system is approved by HIENG-DR, Contractor is to provide all necessary connections and complete connection work in accordance with NEC requirements, and at no cost to the Government. Such connection is to be via a Contractor installed meter, with the Contractor providing monthly reimbursement to the cemetery based on metered quantity usage multiplied by the electric rate in effect during that month.
- H. The Contractor shall monitor and record rainfall occurring at this site during the contract period. The Contractor will supplement natural rainfall with temporary hoses and sprinklers and water trucks as needed to comply with all guidelines concerning watering of turf and newly seeded areas.
- I. Refuse Facilities: The Contractor shall provide his/her OWN refuse facilities of which will be located only in the HIENG-DR approved "Staging Area". Contractor shall not place dumpsters or refuse facilities in any other location at the cemetery other than the approved staging area.

The Contractor is required to dispose of all debris and other waste materials generated by his/her work at a licensed off-site landfill unless otherwise directed by the HIENG-DR. The Government shall not provide receptacles for disposal of debris as a result of the services provided under this contract. In case of Hazardous Materials, the Contractor is required to obtain required disposal permits from the State regulatory agency.

- J. Portable Chemical Toilets: The Contractor shall provide portable chemical toilets for use by workmen as necessary to comply with applicable OSHA requirements. These portable toilet facilities shall be kept clean and free of excessive odors, insects, etc. Portable toilet facilities will be located in the HIENG-DR approved Contractor Staging Area only - it is not permissible to locate portable toilet facilities in any other locations throughout the cemetery. Use of the permanent cemetery toilet facilities by workmen is strictly prohibited throughout the duration of this contract.
- K. Only Contractor's equipment and supplies (property) required to perform work under this contract shall be stored at the Contractor's designated storage area at the end of each workday. No Contractor equipment maintenance repairs of any kind can be done on cemetery property without the prior approval of the HIENG-DR.
- L. Temporary Irrigation System: The Contractor shall supply and install a temporary irrigation system for all new grass areas. The temporary irrigation system shall consist of commercial-quality equipment and products, including a County approved reduced pressure backflow preventer and irrigation submeter at the point of connection. Contractor shall pay for water usage directly to the County of Maui. The irrigation system shall provide complete coverage of all new grass areas and irrigation equipment shall be adjustable to minimize overspray onto existing structures, walkways, or roadways. Provide adequate protection for piping from vehicular traffic at all roadway crossings. The temporary irrigation system shall be designed such that each phase of work has a separate point of connection and control valves. All irrigation equipment shall be maintained by the Contractor throughout the maintenance period. The Contractor shall remove the temporary

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

irrigation system upon acceptance of the landscape work at the end of the maintenance period for each phase. The Contractor shall repair any damage resulting from removal of the temporary irrigation system at no additional expense to the Government. Contractor shall request for final acceptance from HIENG-DR upon removal of the temporary irrigation system. Submit a scalable irrigation plan to the HIENG-DR for approval prior to construction.

A.3.0 CONTRACTOR PERSONNEL

A.3.1 CONDUCT

Contractor personnel are required to adhere to the following standards of dress, conduct, supervision and training while performing work on Government property.

Any violations shall be subject to immediate enforcement action by the HIENG-DR if these standards are not adhered to. Contractor shall be responsible for training and safety precautions prescribed by OSHA regarding safety equipment and devices. Contractor personnel shall:

- A. Be fully clothed at all times, to include short sleeve or long sleeve shirt to cover body from the waist to the neck and long pants or slacks. Garments, which have a message, slogan, or printing of any kind other than the Contractor's business attire, are prohibited. Muscle shirts or sleeveless shirts are prohibited. Uniforms are acceptable as detailed in paragraph B. below.
- B. Maintain a neat and professional appearance throughout its workforce, vehicles, equipment, and maintenance areas. Uniforms are acceptable. If uniforms are used, they must be in unison among all employees.
- C. Not engage in loud or boisterous behavior, angry outbursts or use profane or abusive language at any time on Government premises. Playing radios and/or electronic games/devices shall only be done at lunchtime and in a designated break area. Due to the sensitive mission of the cemetery, Contractor employees will come into daily contact with grieving individuals, therefore Contractor employees will exercise and exhibit absolute decorum, courtesy, and respect while within the cemetery or at its perimeter or entrances. Inquiries from cemetery visitors shall be politely referred to Government cemetery staff. Gratuities of any kind are strictly prohibited.
- D. Consume food and beverage only within areas designated by the HIENG-DR(s). Intoxication, and violence or criminal acts of any kind will not be tolerated and is cause for immediate removal from Government property. Use or sale of intoxicating beverages and/or drugs is strictly prohibited, and use of tobacco products is only allowed in specific areas designated by the HIENG-DR.
- E. Only take breaks/rest periods and lunch breaks at the Contractor Staging Area, not in the field. Workers are to utilize Contractor provided temporary chemical toilet facilities located only in the Contractor Staging Area. Misconduct shall form the basis for immediate contract enforcement action, to include immediate removal from the cemetery.

A.3.2 WORKER PARKING

All Contractor employees are to park only in the HIENG-DR approved Contractor Staging Area identified for this project. Workers are not allowed to park throughout the cemetery grounds. Violation of this requirement shall form the basis for immediate contract enforcement action to include removal from the cemetery.

A.3.3 RESPONSIBILITIES AND VIOLATIONS

The Contractor is responsible to ensure that his/her employees (including Contractor Consultants, sub-Contractors, etc.) are aware of all the terms and conditions set forth in the contract regarding their

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

performance and conduct. Any violation of Contractor conduct requirements may result in contract termination with possible repercussions, including costs incurred, debarment, or fines.

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

A.4.0 LABOR FORCE, EQUIPMENT, AND SAFETY

A.4.1 TIME

Time is of the essence. The Contractor shall be aware of the intensive labor and equipment requirements needed to meet contract specifications. Inclement weather is not an excuse for not meeting specifications. Contractor shall be responsible to provide at no additional costs, labor and equipment as necessary to meet deadlines. The Contractor shall use any additional resources necessary to meet or return to specified work requirements after special events and/or services. The Contractor shall determine the number of employees and the amount and kinds of equipment needed during the period of performance.

A.4.2 LABOR

In accordance with 52.222-41, Service Contract Act, the Contractor shall be aware of the requirements needed to meet the contract specifications. If union work force is utilized, the Contractor will insure the contract between his or her company has a no strike clause to insure the contract between the Contractor and the Cemetery is met.

If at anytime the Contractor becomes aware, anticipates or plans any changes within his/her company or personnel that might impact the performance of this contract, the Contractor shall immediately notify the HIENG-DR.

A.4.3 SAFETY

Matters related to safety, and any actions of the Contractor, must meet all safety requirements of MVC's Safety Officer, Department of Veterans Affairs, OSHA, and the State. It is incumbent upon the Contractor to be familiar with these requirements. "Safety" shall also include the Contractor having a safety representative who maintains regular and routine contact with the Safety Officer at MVC.

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

A.5.0 GOVERNMENT RESPONSIBILITIES

A.5.1 PRECONSTRUCTION

Upon award of the contract, the Government shall inform the Contractor prior to commencing the work, of any known damages to the cemetery grounds, markers or any other areas that the Contractor is unaware of and not responsible for. In addition, upon award of the contract, a walk-through of the cemetery grounds by the HIENG-DR, and Contractor will be scheduled to occur. The Contractor shall obtain a current schedule of burial and funeral services for coordination purposes and shall regularly check with the County of Maui and the Office of Veterans Services (OVS) for updates to the schedule.

A.5.2 ASSISTANCE

The Government **shall not** provide the Contractor with any furnishings, fuel storage, equipment, materials, restrooms, or telephones. Electricity will only be provided as defined in Paragraph A.2.6(G). **Water will only be provided as defined in Paragraph A.2.6.H.**

A.6.0 GRAVE MARKER REALIGNMENT, RESETTING, AND BACKFILL

A.6.1 OVERVIEW

This section outlines upright/flat marker realignment requirements. Raise, Lower, Realignment, Reset, and Backfill services consist of extracting, resetting, aligning, backfilling and tamping/compacting grave markers that are already in place which have shifted out of vertical and/or horizontal alignment and plumb, as well as inventorying and assuring accurate placement of gravesites at MVC. The design intent is to improve the aesthetics of the cemetery by having neatly aligned grave markers, with the goal of achieving "Shrine Status." The Contractor shall provide all supervision, professional advice/guidance, labor, parts, materials, equipment, and personnel necessary to provide the services defined herein. Special care shall be taken during the entire project to ensure no damage occurs to the markers and HIENG-DR-approved gravesite paraphernalia.

TO ENSURE THE ACCURACY OF MARKER PLACEMENT DURING THE RAISE AND REALIGNMENT PROJECT, THE FOLLOWING PROCEDURES WILL BE FOLLOWED BY DEPARTMENT OF DEFENSE PERSONNEL, CEMETERY PERSONNEL AND HIENG-DR BEFORE THE RAISE & REALIGNMENT PROCESS BEGINS

The HIENG-DR will provide the Contractor with the correct Gravesite Layout Map(s) prior to beginning the RESTORATIONRestoration project. The Contractor shall conduct an initial gravesite verification survey prior to the RESTORATIONrestoration of any marker in the cemetery and compare the inventory with the plans and burial register report provided. The Burial Register Report and gravesite layout map(s) will be used to verify the section, row, grave number, first and last name of each decedent and the condition of the marker included in the scope of work (SOW). All inconsistencies will be researched, discussed and resolved with HIENG-DR prior to the restoration of any marker. The HIENG-DR will give the approval to begin the project upon acceptance of the verification survey.

Prior to the completion of each work day, a Daily Marker Verification Survey will be completed for all markers raised & realigned. The HIENG-DR /cemetery director/designee will verify the accuracy of the placement of markers on the correct gravesite using the same Burial Register Report and gravesite layout map(s) that were used for the initial marker verification survey. Daily, the Contractor shall identify any inconsistencies and ensure corrective actions are completed that day. The Daily Marker Raise & Realign Verification Survey will be maintained by the Contractor and approved by the HIENG-DR for certifying payments for completed work, tracking project progress and other administrative needs.

When site conditions are restrictive and it is not possible to safely operate equipment while keeping the markers on the gravesite, the contractor will prepare these sites by hand. At no time may markers be removed from the gravesites.

The contractor is responsible to protect markers during the realignment & turf renovation process from damage or being discolored from contact with dirt, soil or other contaminants.

MARKERS WILL NOT BE PHYSICALLY REMOVED FROM THE GRAVESITE DURING THE O&M PROJECT

A.6.2 GRAVE MARKER LOCATIONS

Design documents for exact marker locations where adjustment, realignment, resetting and backfill begin are provided to the Contractor in the bid documents. Grave marker information (including, but not limited to: name, date of birth, date of death) and pre-construction photographs is included in the bid package for verification purposes in digital file format on a USB-type drive. All grave marker information shown in the design documents are accurate up to the date of the survey, indicated on the plans. During the on-site construction period, the Contractor shall assist the County in locating new burial sites and grave markers along the row alignment baselines. All new burials shall be in Plot 16, unless specified by the HIENG-DR.

A.6.3 RECORD KEEPING AND REPORTING

The Contractor's Project Manager shall provide the HIENG-DR(s) with weekly written accurate reports detailing the section and range of graves in that specific week. These lists will be provided on not less than a weekly basis, and shall identify all of the above work that took place within the previous seven calendar days. Upon request, the Project Manager shall also provide a plan of action for the upcoming week, regarding marker locations and specific areas where work is being scheduled to occur.

A.6.4 WORK ACTIVITY SEQUENCE

In burial sections where work consists of Grave Marker Raise/Realign, Cleaning, and Turf Renovation -
- The Contractor shall submit proposed sequence of work activities to the HIENG-DR for approval prior to starting work; the proposed work sequence of activities shall detail all work including placement and handling of grave markers in accordance with the specifications and plans. Surface renovation work will typically occur either in conjunction with or prior to specified grave marker raise and realign work in order to achieve the specified requirements for flowing precision uniformity of grave markers with the leveled burial section surface terrain. When grave markers are removed from any row to complete required work, each end of row shall have a temporary control marker placed by a registered surveyor. The Contractor shall create a working drawing showing specific locations of each individual grave marker to facilitate precise grave marker reinstallation in the correct location. The contractor must use the information and photographs received in the bid package to verify the accuracy and placement of every grave marker immediately following all realignment work. HIENG-DR will verify Contractor's accuracy.

A.6.5 GRAVE MARKER SPECIFICATIONS

Raise, lower, realign, reset, backfill, and cleaning of grave markers shall be accomplished as follows:

- A. Typical NCA-standard full-casketed grave marker gravesites are 5' X 10' and cremation flat marker gravesites are 5' X 5', memorial marker sections are 3' X 3'. There is a potential for gravesites and markers to be of non-NCA standard size, as the cemetery is very old. Regardless of size, all gravesites and their respective markers at MVC shall be subject to the work performed for this project. Typical NCA-standard granite flat markers are 24 inches wide and 12 inches in length. There are two (2) thickness and weights of flat markers: 3 inch thick markers weighing approximately 90 pounds and 4 inch thick markers weighing approximately 130 pounds. Standard upright markers (a.k.a. marble headstones) are approximately 42 inches long, 13 inches wide, 4 inches thick, approximate weight: 230 pounds. Existing markers within MVC may not conform to

NCA standards but will be included in the project; all grave markers within MVC shall be raised, lowered, realigned, reset, backfilled and cleaned according to the construction documents. The following are also considered grave markers and will be included in the project: 1" thick 1' X 2' bronze or brass flat markers affixed to concrete blocks; upright markers affixed to concrete blocks. All grave markers appearing to have been installed at an angle shall be reinstalled at the same angle. The Contractor shall verify any uncertainties with the HIENG-DR.

- B. The Contractor shall verify all names, dates, ranks, and other information of all grave markers with all applicable plans, records, and photographs before and after construction. The Contractor shall also verify the condition and location of all grave markers and their respective buried permanent vases before and after construction.

- C. All temporary markers, floral arrangements, and permanent floral vases (including their respective in-ground bases, housings, holsters, foundations, etc.), a.k.a. floral vases a.k.a. vases, at a grave site shall be carefully and orderly removed prior to the raising and realignment of grave markers. All HIENG-DR-approved temporary markers, floral vases, and any other HIENG-DR-approved paraphernalia shall be labeled with the information (name, rank, date of birth, date of death, and other significant identifying information) linking it to their respective markers to ensure accurate re-installation and/or return. The floral vases will be inspected and evaluated by Contractor. If any floral vases are found or suspected to contain any hazardous materials, they will be tested by the Contractor; the Contractor shall dispose of any vases containing hazardous materials in accordance with all federal, state, and local laws. A log of disposed vases (including identification of the vases' respective grave markers) shall be kept by the Contractor and submitted to the HIENG-DR. Any vases that are deemed too worn and no longer serviceable will be legibly labeled with their respective grave marker's information (name, rank, date of birth, date of death, and other significant identifying information), packaged to prevent damage, and stored in a secure container approved by the HIENG-DR for distribution to their respective owners (the Office of Veterans Services, SDOD, and County of Maui shall be responsible for contacting the respective floral vase owners). Labels shall be removable, non-permanent, and not cause any damage to the vase. All packaging shall also be labeled in the same manner described in this section.

Upon re-installation of a grave marker, the Contractor shall also re-install a maximum of one of the grave marker's respective floral vase at the appropriate gravesite, per the detail shown in the construction plans. Any remaining floral vases shall be available for pickup by their respective owner(s) from a secure container until the end of the project. The Contractor shall distribute the vases and develop a vase distribution plan, schedule, and sample log and submit to the HIENG-DR for approval prior to construction. The Contractor shall dispose of any unclaimed vases at the end of the project. Grave markers with permanently attached floral vases shall have all their respective floral vases reinstalled. Grave markers and floral vases shall not be physically altered. Prior to re-installation, the Contractor shall verify the numbering sequence and location of all grave markers and floral vases.

- D. Removal/Handling/Storage of Grave Markers: Markers will be removed from their sockets by using wooden, and or metal clamps. If metal clamps are used the area that contacts the marker must be protected with a rigid fabric that will prevent damage to, and marking of, the marker. Clamps may be attached to a Bob Cat or similar Machine to extract marker from socket. Extreme care will be used not to scratch or damage markers in any manner. Before grave markers are removed from any row to complete required work, each end of the row shall have a temporary control pin marker placed by a registered surveyor, and Contractor shall create an as-built map showing specific

location of each individual grave marker by actual number and name in order to facilitate precise grave marker reinstallation in the correct location.

- E. The measurements between rows of grave markers within each row may differ from one section to the next, discuss with HIENG-DR where this is found to occur. These measurements shall be adhered to as closely as possible. Some variances may be allowed in order to keep a uniform appearance of grave markers being aligned. Markers shall be accurately and precisely reinstalled on the correct gravesites with the utilization of temporary grave plotting maps, and temporary Contractor installed control markers accurately and precisely installed at the ends of each gravesite row.
- F. The Contractor shall pull the grave markers from the grave marker sockets and carefully store the markers on each associated gravesite. A 4" deep x 1'-6" wide trench shall be dug under each grave marker row realignment base line (as shown on the site plans) beginning at the edge of the first grave marker on the row alignment baseline and continuing until reaching the last grave marker of the row alignment baseline to accept GRASSPAVE 2 or approved equal (GRASSPAVE @ is a trademark product produced by Invisible Structures, Inc., 20100 East 35th Drive, Aurora, Colorado, 80011-860). Over excavate the soil directly below each grave marker to a full 7" depth, and then backfill this same area (directly below each grave marker) with 3" min thickness of moistened Crushed Limestone Base Material (graded aggregate sizes ranging from crushed powder fines up to 3/8" maximum) heavily tamped to full compaction and leveled for the required alignment of the grave markers. After heavily tamping and compacting the soil in the bottom of the 4" depth continuous trench, install 1'-6" wide continuous strip of GRASSPAVE 2 or approved equal along the entire length of each grave marker row beginning at the edge of the first grave marker and continuing until reaching the far edge of the last grave marker in the same row. If material shall be spliced, this shall be done in accordance with GRASSPAVE or approved equal @ manufacturer's instructions. Directly underneath each grave marker, backfill the honeycomb voids of the GRASSPAVE 2 or approved equal with moistened Crushed Limestone Base Material (graded aggregate sizes ranging from crushed powder fines up to 3/8" maximum) to fill the 1" high rings and all spaces between the rings, and compact this material into place. Top elevation of the filled GRASSPAVE 2 or approved equal material shall be the base for the grave markers. Backfill clean topsoil into the remaining areas of Grasspave 2 honeycomb located in the trenches between the grave markers and firmly compact this material into place. Remaining trench areas around and between all grave markers from top of the GRASSPAVE 2 or approved equal surface to top of ground surface shall be filled with 3" minimum clean topsoil compacted firmly into place so that settlement shall not occur. Since grave markers dimension varies, the Contractor shall modify the GRASSPAVE 2 or approved equal to accommodate variations in depth and width. The Contractor shall provide materials that will allow the replacement of sections disturbed by in-fills.
- G. Flat markers shall be reset to a depth so that the top surface of the flat markers are 1" above grade in accordance with MVC Master Plan; upright markers shall be set vertically plumb in all directions, in all cases in a line vertically and laterally, and where possible transversely with vertical markers of other graves using a top string, a back of upright marker string line, and a side of upright marker string line. All upright markers shall have their back face, not their concrete base, aligned along the row alignment baseline. All measurements and string line set-ups shall be taken from established section control markers and/or from temporary control markers installed by the Contractor around the section and at the end of each grave row, not from previously set grave markers, unless otherwise directed by the HIENG-DR. All measurements shall be made in ascending grave number order. In rolling terrain where sloping ground conditions exist, all grave markers shall be set with

top surface at proper heights and levels to provide a uniform flowing transition through the rolling terrain. Markers shall be accurately and precisely reinstalled on the correct gravesites with the utilization of temporary grave plotting maps, and temporary Contractor installed control markers accurately and precisely installed at the ends of each gravesite row. Grave markers shall be set in a line laterally, transversely, and diagonally with grave markers of other graves. After all work has been completed, the grave markers in all soil and terrain conditions shall be held firmly in place by the compacted soil and crushed limestone base so that the grave markers are rigid with no give, play, or movement when subjected to forces by the HIENG-DR.

- H. The realign crew starts on a row of grave markers close to the center of the section to be realigned. The Contractor shall designate the "key" stones (a.k.a. keystones) for each row. Keystones are the markers that are visibly most in line with the row alignment shown on the plans. Keystones are also as close as possible to the proper measurements for that section of markers. For assistance in finding keystones, the Contractor shall follow the direction of the HIENG-DR.
- I. At the start of work in each burial section, the first row of reset/realigned grave markers in each burial section shall be inspected by HIENG-DR for appearance, spacing, depth, alignment, plumbness, height, accuracy, and smoothness in grade transition. No further setting of grave markers shall be done until this first row has been inspected and accepted by the HIENG-DR. It is the Contractors responsibility to notify the HIENG-DR 24 hours in advance of when each of these inspections will be needed.
- J. Heavy strings or lines shall run along the sides and tops of the keystones. These lines are marked with the proper measurements- (size of section) for the section being aligned. All remaining grave markers in the row are then aligned along the strings front to back and side-to-side even with the measured marks on the line. Each grave marker is adjusted front to back and side-to-side keeping the back of the grave marker along the string and the side of the grave marker along the measured mark. Maximum vertical, lateral, and transverse tolerance of any grave marker off the alignment string lines and/or marks shall be 1/8", or less. Each grave marker is also raised or lowered as necessary to be right at topsoil level subject to the top string slopes required for the markers to flow with the sloping terrain. The grave marker is then aligned along the string front to back and side-to-side even with the measured mark on the line. The grave marker is leveled and plumbed front to back and side-to-side keeping the back of marker along the string and the side of the marker along the measured mark.
- K. The alignment of the grave markers should be checked frequently during this process to ensure that the marker is not out of level or off the mark on the line. This process of raising and realigning is repeated for each row of markers. Grave markers in all completed work areas shall be firmly set and anchored in place with no movement from forces subjected by the HIENG-DR.
- L. Any grave markers broken or damaged by the Contractor shall be reported to the Cemetery Administrator or HIENG-DR by close of business each working day in order that the grave can be properly marked. The Contractor shall be responsible for the cost of the grave marker replacement. All grave marker replacements shall be coordinated with the HIENG-DR. Any grid or sectional monuments disturbed, displaced or broken shall be replaced by the Contractor at his cost. All grid or sectional monuments disturbed, shall be properly reset by a licensed land surveyor at Contractor's expense. Curbs, roads, walks, turf, trees, utilities existing above and below the ground that are damaged or disturbed by the Contractor during performance of contract work shall be

repaired at the expense of the Contractor. Repairs to the above shall be corrected by the Contractor within fourteen (14) workdays, unless otherwise agreed to with the HIENG-DR.

A.6.6 GRAVE MARKER CLEANING GENERAL INFORMATION

The Contractor shall provide all labor, parts, equipment, supplies, transportation and personnel required to provide grave marker cleaning services. The cleaning shall consist of cleaning grave markers at MVC.

A.6.7 DEFINITION

“Clean” under this contract means: The markers shall contain NO discoloration, environmental deposits, mold, mildew, moss, algae, lichen, dirt/mud, grass clippings, grass marks, bird droppings.

A.6.8 CONTRACTOR DUTIES AND RESPONSIBILITIES

- A. All equipment and supplies maintained and operated by the Contractor shall be consistent and fully compliant with all applicable Federal, State, and County laws, ordinances and regulations and meet State inspection, safety, licensing, registration, and insurance requirements.
- B. National Cemeteries are national shrines for our nation’s heroes, the veteran(s) and their family. The standards of maintenance and appearance shall reflect this nations concern for those interred. The Contractor shall demonstrate a clear understanding of, and the sensitivity to, environmental issues during the performance of the contract.
- C. The Contractor shall be responsible for replacement of any grave markers or marker, which is chipped, marred, or damaged at the fault of the Contractor and shall bear all costs associated with replacement and reinstallation. Any such damage shall be brought to the attention of the HIENG-DR prior to replacement or reinstallation.

A.6.9 RECORD KEEPING AND REPORTING

The Contractor's Superintendent shall provide the HIENG-DR(s) with weekly written accurate reports identifying the following: All grave markers cleaned shall be recorded per gravesite location. These lists shall be provided on not less than a weekly basis, and shall identify all of the above work that took place within the previous seven calendar days.

The Contractor shall keep a log of all distributed and disposed of vases. Samples of all logs shall be submitted to the HIENG-DR for approval prior to construction.

A.6.10 CLEANING OF GRAVE MARKERS

- A. All temporary markers, floral, commemorative, or other types of decorations (arrangements) causing interference with the cleaning of markers shall be carefully and orderly moved from and, upon completion of the cleaning of the markers moved back to the gravesite by the Contractor.
- B. Cleaning techniques shall demonstrate a clear understanding of and the sensitivity to, such environmental issues as ground water contamination, wetlands and shall be consistent and fully compliant with all applicable Federal, State, and County laws, ordinances and regulations. Clean

water shall be used to clean grave markers. Cleaning techniques will use a water feed with a Makita 4 inch Electronic Wet Stone Polisher, Model No. PW5001C (or equivalent) and StoneMaster® plus premium quality polishing discs (diamond-impregnated) for granite 50g (or equivalent). Cleaned marker should have the same appearance as that originally received from manufacturer. Use caution to prevent damaging any bronze faceplates of the flat markers. If water used in cleaning should soften the soil around the base of the marker so that the marker is loosened, care shall be taken not to tip the marker out of plumb or alignment. Care shall be taken to protect the turf area from damage. Any turf damaged by the Contractor shall be restored at Contractor's expense. Grave markers shall be set and anchored firmly in place with no movement from forces subjected by the HIENG-DR or inspector after cleaning has been completed.

- C. After cleaning in accordance with Paragraph B. above, a chemical cleaning agent such as Sporiclean (or acceptable biodegradable and non-toxic alternate) shall be applied onto the markers and is not to be washed off. Contractor shall submit the proposed cleaning chemical and the required Material Safety Data Sheets (MSDS) to the HIENG-DR for approval prior to use of any chemicals including but not limited to Sporiclean. The Contractor shall be responsible for any turf or seeds damaged during the cleaning process.
- D. Markers that were cleaned but have become marked, discolored, dirt covered, or muddied due to subsequent contract work including but not limited to turf reestablishment shall be re-cleaned at no additional cost to the government. Markers that become discolored, dirt covered, or muddied, after initial cleaning has been completed, but prior to overall project completion, shall be re-cleaned at no additional cost to the government. All markers shall be clean at the time of project completion and final inspection.
- E. The end result of this service is that the Contractor shall provide the Government "CLEAN" grave markers. The definition of "CLEAN" is listed above in Paragraph A.6.7.

A.6.11 PHASING AND WORK SEQUENCING

- A. All work shall be accomplished in a sequential manner. If the Contractor's method of raising and realigning the grave markers requires removal of the marker(s) from the gravesite(s) area(s), then the work shall be limited to an area of no more than 500 gravesites at any given time, in an area(s) as determined by the HIENG-DR. The Contractor shall correctly raise and realign the grave markers, and achieve the correct finished grade in the area of work to be approved by the HIENG-DR before any grass can be installed.

The Contractor estimates _____ (for Contractor – please indicate) grave markers will be completed per day.

- B. However, the spraying and killing of existing turf, item A.7; A. B., and C. of this contract, is not limited to this 500 gravesite area, and can be performed in advance up to one full section at a time or more if approved by the HIENG-DR. The Contractor shall submit a proposed "Project Work Schedule Sequence" to the HIENG-DR for review and approval prior to the start of work in each phase.
- C. If the Contractor's method of raising and realigning does not require grave markers to be removed from the gravesite areas, then the Contractor will be restricted to work in only one section at a time. The Contractor shall correctly raise and realign the grave markers, and achieve the correct

Gravesite Restoration
Maui Veterans Cemetery, Phase II
Makawao, Island of Maui, Hawaii
Job No. CA-1208-C2, FAI No. HI-14-33

finished grade in the entire section to be approved by the HIENG-DR before any seeds can be installed.

A.6.12 MARKING OF GRAVESITES

To allow for visitation by the public during weekends, all gravesites under this contract must be marked with either the gravesite's permanent grave marker or a temporary gravesite marker by no later than 4:00 PM every Friday and remain until the following Monday or later, when required to be removed by the Contractor in order to perform work. (If Monday is a Federal Holiday, then the markers will remain until Tuesday). If the Contractor's method of raising and realigning the grave markers requires removal of the marker(s) from the gravesite(s) area(s), then the Contractor shall assemble Government provided temporary gravesite markers (stands and tags) and install on their respective gravesites as required to insure all gravesites under this contract are marked by 4:00 PM Friday. The Contractor is responsible for identifying the quantity of temporary gravesite markers required, taking possession and storage temporary gravesite markers when not in use for the duration of this contract and return to the cemetery upon the completion of the contract.

A.7.0 TURFGRASS RENOVATION

This section outlines operational procedures to be followed in gravesites designated for grading / renovation and re-establishment of the existing turf.

- A. The Contactor shall collect and submit soil samples from each section of the site to a soil-testing laboratory approved by the HIENG-DR several weeks prior to the intended operation to determine soil fertility and pH adjustment requirements. Test results shall include a summary of the soil analysis findings and recommendations to correct soil deficiencies including, but not limited to, types and amounts of amendment and fertilizers to be added to the soil, and a schedule for applying amendments and fertilizers at pre-planting, planting, and plant establishment periods. Test results and recommendations for correcting soil deficiencies shall be furnished to the HIENG-DR upon completion of the laboratory testing for review and approval prior to construction.
- B. The Contractor shall be responsible for maintenance of all existing grass areas within the project limits once active construction begins. Maintenance of the existing grass areas shall consist of mowing all areas, to the normal maintenance height as approved by the HIENG-DR, and removal of the grass clippings. The Contractor shall submit a maintenance schedule for maintaining all grass areas to the HIENG-DR for approval. The Contractor shall continue to mow all existing grass areas within the project limits throughout the contract period for a period of one year or until final acceptance of the work is granted by the HIENG-DR, whichever is greater.
- C. After preparatory mowing, the entire vegetated area, within the limits of the active project phase, shall be sprayed with Round-Up Pro herbicide or equal. Application rate shall be the maximum label-recommended rate for the complete elimination of perennial grass species and contaminant weeds. Allow fourteen (14) calendar days after application for herbicide to fully translocate throughout all plant parts. Repeat treatment as required to completely kill existing turf and weeds.
- D. Power rake or vertical-cut entire treated area to loosen and remove all residual plant debris, rocks, twigs and thatch. Import topsoil and apply soil test recommended quantities of starter fertilizer and soil amendments to achieve optimum fertility and pH. Spread evenly over entire area using any suitable broadcast application device. Roto-till area to a minimum depth of 8 inches to uniformly mix fertilizer, soil amendments, and topsoil and to uniformly loosen top surface for re-grading and leveling. Finely grade and compact surface of site to achieve desired finished appearance, which shall be smooth and uniformly level down each row and between each row, free of all surface ripples, depressions, high spots, low areas, and ridges.

Erosion control methods shall be required for this project. The contractor shall develop a plan to prevent surface sheet erosion during the performance of the contract. The contractor shall submit his erosion control plan to the HIENG-DR for approval before startup of the project. The VA reserves the right to reject the contractor's plan if the VA review indicates that the plan will result in an undesirable product.

- E. In locations where existing burial area surface has formed "ridges" between rows, these areas shall be knocked down by grading between high and low surfaces of the rows so that finished surface is uniformly flowing from row to row, and down each row. If this process does not achieve desired smooth and uniformly flowing finished grade due to numerous depressions and low or sunken areas in the existing surface grade, import, spread and compact additional high quality topsoil of similar characteristics and texture to the soil already present on site.

- F. Topsoil shall be free of foreign matter, any objects bigger than 25 mm (1 inch) and weed seeds. Apply and compact sufficient topsoil to eliminate all ripples, depressions, and sunken grave areas as needed to achieve the desired smooth and uniformly level finish grade and appearance. Protect finished areas from damage by vehicular or pedestrian traffic. Install and maintain erosion control material to meet local requirements. A soil analysis shall be performed on imported topsoil as described in A.7.A. The soil analysis results with amendment and fertilizer recommendations shall be furnished to the HIENG-DR for review and approval prior to placement of imported soil.
- G. Fine grade the surface of the soil to level undulations or irregularities caused by tilling or other work before proceeding with grassing operations.
- H. Before any grassing operations, the final grade shall be inspected and approved by the HIENG-DR.

A.7.1 TURF ESTABLISHMENT BY SEED

- A. Seeds: Grass seed species shall be AZ-1 Kikuyu Grass (*Pennisetum clandestinum* 'AZ-1') and shall be genetically pure, free of weeds, pests, and disease. Seed shall be acquired from a local, State certified commercial grass seed supplier. Seed shall be hulled and State certified stating analysis of purity in original, unopened, sealed containers, labeled with weight, certified analysis, brand name, address of manufacturer, percent purity, and indication of compliance with all applicable State and Federal laws. Seed shall comply with Hawaii Administrative Rules Title 4, Subtitle 6, Chapter 67 Seed Rules. Labeling shall indicate that the seeds passed a certified germination test. Seed shall not be more than 12 months old from the date of the certified germination test. Seed shall be certified to the following properties: **Pure Seed (95% minimum); Crop Seed (1% maximum); Weed (0.5% maximum); Inert material (5% maximum); Germination (85% minimum)**. Prior to delivery of seeds, the Contractor shall request an inspection of the work area by the HIENG-DR(s). Any discrepancies in the ground preparation shall be corrected prior to seed application in the work area.
- B. Mulch: Mulch shall be specially processed fiber containing no growth or germination inhibiting components. Recycled mulch material, such as processed newspaper, is allowable if its use is acceptable to the HIENG-DR. Fibers shall form a homogeneous slurry after addition and agitation in hydro-mulch equipment with seed, pre-plant fertilizer, water, and other additives non-detrimental to plant growth. When hydraulically sprayed on the soil, fibers shall form a blotter-like ground cover that readily absorbs water and allows infiltration to the underlying soil. Apply at a minimum rate of 1,700 pounds per acre.
- C. Fertilizer: Proper pre-planting fertilizer, as recommended in the soil analysis report, shall be used in the hydro-mulch mix to ensure optimum rooting. Contractor shall use type, quantity, and ratio of fertilizer recommended by the grass grower or as approved by the HIENG-DR.
- D. Seed Application: Seeding method shall be hydroseeding. Notify the HIENG-DR not less than twenty-four hours prior to hydroseeding operations. Do not hydroseed until the HIENG-DR inspects and accepts areas for planting. HIENG-DR will inspect planting areas to ensure that surface and subsurface water is properly collected and disposed of and areas to be planted are protected from erosion. Upon HIENG-DR's acceptance for planting, begin hydroseeding the planting area. Acceptance for planting does not relieve the Contractor of responsibility for repair of damage to planting areas until grassed areas are acceptable to the HIENG-DR.

AZ-1 Kikuyu grass shall be seeded at a rate of 80 pounds per acre.

Hydroseeding of planting areas shall consist of mixing the grass seed, hydromulch fibers, tackifiers, pre-plant fertilizer, and spraying the hydromulch slurry mixture over the area to be planted. The Contractor shall use HIENG-DR-accepted hydromulch equipment with built-in agitation system and operating capacity sufficient for uniform mixing until slurry is pumped out of tank. Hydro-mulch equipment shall have distribution and discharge lines installed which are large enough to prevent stoppage, and hydraulic discharge spray nozzles that provide uniform distribution of slurry. When hydraulically sprayed on the soil, the fibers shall form a blotter-like ground cover, which readily absorbs water and allows infiltration to the underlying soil. In every application, complete coverage of the soil shall be attained. Mulch shall be applied at the minimum rate of 40 pounds per 1,000 square feet (1,700 pounds per acre) using water at the rate of 25 gallons per 1,000 square feet (1,000 gallons per acre).

- E. Watering: Water immediately after planting. Soil should be moistened to a minimum depth of two inches. Repeat irrigation cycles at regular intervals to keep hydromulch and soil moist to a depth of two inches. Do not allow water to pond and avoid excessive watering. Soil shall be kept moist but not saturated.

A.7.2 TURF ESTABLISHMENT PERIOD

The Establishment Period for turf shall begin immediately after the complete turf installation of a section(s) with the approval of the HIENG-DR or designee, and continue until the date that the Government performs the final inspection and acceptance for each phase of the work. The Contractor shall maintain the new grassing area for each phase for 90 days. During that period the Contractor shall:

- A. Eradicate all weeds. Fertilize, re-seed, and perform any other operation necessary to promote the growth of uniform, healthy, high quality turf. Use of granular pre-emergent herbicide will not be allowed. Contractor shall perform continuous weed eradication by hand or other methods acceptable to the HIENG-DR. Contractor shall present a weed control and eradication plan to the HIENG-DR for review and approval prior to the start of the Turf Establishment Period.
- B. Irrigate hydroseeded areas on a regular schedule immediately following installation to keep the hydromulch and soil moist and healthy and to promote germination, growth and rooting, while also carefully conserving water, by not over watering. Schedule watering to prevent wilting, puddling, and erosion.
- C. Replant areas void of turf 1 ft² (one square foot) and larger in area.
- D. Begin mowing when grass is firmly rooted into the soil and the top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain a height of 1 inch.

The Contractor shall be fully responsible for the health and appearance of the turf during the Turf Establishment period and shall perform corrective actions at no additional expense to the Government.

The contractor shall mow the new grass a minimum of three times and the final height after each cutting shall be 1". The HIENG-DR will not accept the new turf before the three mowings have been performed and new turf growth is considered satisfactory.

Satisfactory Seeded Turf: At the end of the maintenance period, a healthy, uniform, close stand of grass has been established. Turf shall be free of weeds and surface irregularities, with coverage exceeding 95 percent over any 10 square foot area and bare spots not exceeding 5-inches by 5-inches.

In areas where turf work has been completed, clear the area of all debris. Any areas damaged during establishment operations shall be restored to their original condition.

In the event that the HIENG-DR determines the Contractor is not performing in a satisfactory manner during the turf establishment period, the Government reserves the right to perform any or all of the Turf Establishment Operations. The Government shall deduct the fair cost of performing these operations from the Contractor's scheduled payment.

A.7.3 ROOT BARRIERS

This section outlines operational procedures to be followed for the installation of root control barriers where indicated on the Drawings.

- A. Installation of root barriers, including trenching for root barrier installation, shall be done under the direct supervision of the arborist. Root pruning, if required, shall be done prior to grading, excavation, or trenching of roots greater than 2 inches in diameter by carefully cutting exposed surface roots, and carefully exposing sub-surface roots manually or with HIENG-DR approved power equipment. Roots shall be cut with a sharp power or hand saw, rock saw, narrow trencher with a sharp blade, or other HIENG-DR approved root pruning equipment.
- B. Root Barrier: Black, molded modular panels manufactured with 50 percent recycled polyethylene plastic with ultraviolet inhibitors, 85 mils thick, with vertical root deflecting ribs protruding 3/4 -inch out from panel, and each panel 36 inches deep.
- C. Install root barriers where indicated on the Drawings.
- D. Align root barrier vertically and run it linearly where indicated on the Drawings adjacent to existing fence line along Baldwin Avenue.
- E. Install root barrier continuously for a distance of 10 feet in each direction from the tree trunk, for a total distance of 20 feet per tree minimum. If trees are spaced closer, use a single continuous piece of root barrier.
 - (1) Position top of root barrier per manufacturer's recommendations.
 - (2) Overlap root barrier a minimum of 12 inches at joints.
 - (3) Do not distort or bend root barrier during construction activities.
 - (4) In all cases, install root barrier in accordance with the manufacturer's written instructions and recommendations.

A.8.0 CONTRACT MANAGEMENT

A.8.1 REPRESENTATIVES OF THE CONTRACTING OFFICER

The Contracting Officer (CO) will designate one (or more) representatives to serve as the HIENG-DR to act for him/her in furnishing technical guidance and advice or generally directing the work to be performed under the contract. Such designation will be in writing and will define the scope and limitations of the HIENG-DR's authority. A copy of the designation(s) shall be furnished to the Contractor at time of award.

A. The HIENG-DR may direct and arrange the Contractor's work schedule in specific areas of the cemetery to coordinate with daily cemetery activities and operations. Duties and responsibilities of the HIENG-DR include day-to-day monitoring of the contract as follows:

1. Providing contract oversight and technical guidance to the Contractor.
2. Placing orders for services.
3. Verification / certification of payments to the Contractor for services rendered.
4. Assuring that any changes effecting work involved, price, terms and/or conditions under the contract are not implemented before written authorization is issued by the Contracting Officer.

B. All administrative contract functions are the responsibility of the CO and Contracting Assistant (CA). Any modifications to the contract, including those involving no-cost changes, increases and decreases in cost or level of services provided, termination or extension of the contract (in part or in whole) and decisions concerning claims or disputes, will be authorized in writing by the Government Contracting Officer or HIENG-DR.

A.8.2 PROJECT MANAGER

The Contractor shall provide a "Project Manager" who shall be on-site at all times during contract performance. The Project Manager shall have no less than three (3) years' experience as a direct supervisor of a commercial construction operation that includes surveying, soil excavation, and site construction in industrial, commercial and/or public sites. In the absence of the Project Manager, the Contractor shall appoint an Alternate Project Manager (e.g., crew foreman) who shall be responsible for contract oversight.

A. The Project Manager/Alternate Project Manager shall be responsible for the following:

1. Directing, overseeing and coordinating the work involved.
2. Ensuring all work is being performed in accordance with contract specifications.
3. Ensuring work is being accomplished in a timely / expeditious manner without undue delay.
4. Staying abreast of all upcoming cemetery functions including special holiday events and interment activities.
5. Ensuring that contract work does not conflict, interfere or compromise any ceremonies, funerals, processions or visitations or otherwise delay, alter or impact the dignity, security or safety of the event or visit.
6. Ensuring employees are adequately supervised and proper conduct is maintained.

- B. The Project Manager shall re-direct work throughout the rest of the Cemetery – so that productive use of labor and equipment is assured, and downtime is avoided. If the Contractor fails to re-direct employees away from an event in a timely fashion, the HIENG-DR may then do so.
- C. Communication & Coordination of Work with HIENG-DR, Office of Veterans Services (OVS), and County of Maui: Communication with the HIENG-DR (or designee) is strongly encouraged. Burial activities at MVC shall take precedence over contract work activities. The Contractor shall coordinate all his work and burial activities with the County of Maui and the Office of Veterans Services (OVS). Work activity and noise cannot disturb Burial Services. Trucks and workmen are prohibited from passing through the service area during this period (Note: To cause the least possible interference with cemetery activities, contract personnel shall stop (cease) all work in areas where burials are taking place. As a general "rule-of-thumb", work should not take place within 1,000 feet of an ongoing committal service or ceremony).
- D. Notwithstanding the Contractors responsibility for total management during the performance of this contract, the administration of the contract will require maximum coordination between the Government and the Contractor. The Government will provide, at the time of contract award, a list of Government personnel authorized to act as HIENG-DR.

A.9.0 CONSTRUCTION MANAGEMENT SERVICES

A. The Construction Manager (CM) shall be responsible for the following:

1. Reviewing and recommending approval/disapproval of materials submittals and shop drawings, construction progress reports, providing readings and verifying that the marker alignments adhere to an acceptable standard, providing as-built drawings, and participating in a preconstruction conference.
2. Conducting weekly project inspections at the site, at least (2) technical site visits, and one final inspection at project completion to include punch list of outstanding work, and follow up action to allow final acceptance.

A.10.0 INSPECTION AND MONITORING PROCEDURES

- A. Weekly Progress Report: On a weekly basis, the CM shall provide a written progress report to the HIENG-DR of all work completed (**Attachment "D" - Work Summary & Progress Report**). If there are problems or issues adversely affecting progress of the contract, a detailed explanation shall be indicated on the report.
- B. Contract Performance & Quality Assurance: A record keeping system of Contractor work performance shall be established and implemented by the CM for the services involved. The CM will inspect all work performed and submitted by the Contractor for acceptance. To accomplish this, the CM shall develop a **Contract Performance & Quality Assurance Report** to document & monitor Contractor performance and progress. The Government reserves the right to reject any work that does not meet contract specifications. Work rejected by the CM will be re-performed without cost to the Government. All work rejected shall be re-performed to the satisfaction of the CM before any payment shall be made for services rendered. Any and all work shall be completed in a cemetery section before work is initiated in a new section.
- C. Payment: Subject to the requirements in A.10. B. above, the Contractor shall submit a monthly invoice in arrears for all services rendered. Prior to certification of payment, invoices will be verified by the HIENG-DR for accuracy against all Weekly Progress Reports submitted by the Contractor for the billing period.
- D. Federal Holidays: All work required under this contract will be performed during normal cemetery hours of operation. With the exception of Memorial Day and Veterans Day, work is normally not conducted on State holidays. The following is a list of all State holidays:

New Year's Day	January 1
Martin Luther King's, Jr.'s Birthday	Third Monday In January
Washington's Birthday (Presidents' Day)	Third Monday in February
Prince Kuhio Day	March 26
Good Friday	Friday Preceding Easter Sunday
Memorial Day	Last Monday in May
King Kamehameha Day	June 11
Independence Day	July 4
Statehood Day	Third Friday in August
Labor Day	First Monday in September
Veterans Day	November 11
Thanksgiving Day	Fourth Thursday in November
Christmas	December 25

When a holiday falls on a non-work day, Saturday or Sunday, the holiday usually is observed on Monday (if the holiday falls on Sunday) or Friday (if the holiday falls on Saturday).

(End of Work Statement)