

06 November 2014

SUBJ: AMENDMENT NO. 0006 FOR EDWOSB SET-ASIDE FOR INDEFINITE DELIVERY INDEFINITE QUANTITY (IDIQ) CONTRACT SET-ASIDE FOR EDWOSB FOR FLOORING CONSTRUCTION PROJECTS ABOARD MCB CAMP PENDLETON AND NOC FALLBROOK, NWS SEAL BEACH, NWS SEAL BEACH DETACHMENT NORCO, CA.

**I. The following are in reference to specific sections of the RFP.**

**1. The SF1442, Block 13 has been updated as follows:**

“Sealed offers in original and 3 copies to perform the work required are due at the place specified in Item 8 by **11 A.M** local time **20 November 2014.**”

**II. The purpose of this section is to incorporate the answers to the RFIs into the solicitation in order to revise and/or clarify the contractual requirements.**

| <b>Contractor’s Request for Information (RFI)</b> |  |
|---|--|
| Contract #: N62473-14-R-2204; Flooring            |  |
| Task Order #: NA                                  |  |
| Contractor:                                       |  |
| Question #  | Contractor Question/Government Response  |
| 1   | <b>Question:</b> In Amendment No. 002 Section 2.1.3.2 it states a High Performance (Glue Down) 6 Foot Closed Cell Vinyl Cushion Broadloom to be installed. THIS is a Proprietary product and only one carpet manufacture makes it. Can we use a 12 foot product?   |
|   | <b>Response: Please see the amended requirement in Section 09 68 00 “CARPET” paragraph 2.1.3.2.</b>  |
| 2   | <b>Question:</b> In Amendment No. 002 Section 2.1.3.4 it states Attached Cushion: Cushion shall be closed cell vinyl cushion with a microencapsulated takifier applied to 100% of the backing during manufacturing. Cushion shall be applied with a fusion coat 100% vinyl no urethane or laminated cushions will be allowed. All carpet mills use the same process to attach the cushion to the carpet and only the Proprietary product being called out on this solicitation is different can you open the spec so it’s not only calling out the Proprietary product?  |
|   | <b>Response: Please see the amended requirement in Section 09 68 00 “CARPET” paragraph 2.1.3.4.</b>  |
| 3   | <b>Question:</b> In Amendment No. 002 Part 3 Section 3.1.1 it states prior to start of work, the Contractor shall examine for moisture content, alkaline presence, and other conditions under which the carpet is to be installed. Perform a Anhydrous Calcium Chloride Moisture Vapor Transmission Test and provide test results to verify the amount moisture in new or existing slabs. Calcium Chloride shall be less than or equal to three (3) pounds per one thousand square feet in 24-hours. Alkalinity testing shall result in a pH range of 7-9. Notify the Contracting Officer in writing of conditions detrimental to proper completion of work. Do not proceed until unsatisfactory conditions have been corrected. Fill and finish all drilled or cored holes to the existing finish floor elevation. Can we use a Relative Humidity (RH) Testing that meets ASTM F2170 and NOT do a Calcium Chloride Moisture Vapor Test? |
|   | <b>Response: The contract specifications remain unchanged.</b>   |

|   |   |
|---|---|
| 4 | <p><b>Question:</b> In Revised Bid Schedule Section A005AB it states to Install 20 oz. Modular High Performance glue down carpet, to include stair landings. Includes substrate preparation underlayment leveler, edge strips, and reinstallation of thresholds and wood wall base. Includes Anhydrous Calcium Chloride Moisture Vapor Transmission Tests on concrete decks. Can the Edge Strips be removed and have them as a line item by its self?</p>   |
|   | <p><b>Response: The ELIN requirement remains unchanged.</b></p>   |
| 5 | <p><b>Question:</b> In Revised Bid Schedule Section A005AF it states to Install .125 Thick Commercial Vinyl Composition Tile (VCT). Includes stairs and landings, substrate preparation, underlayment leveler, edge strips, and reinstallation of thresholds and wood wall base. Includes Anhydrous Calcium Chloride Moisture Vapor Transmission Tests on concrete decks. Can the Edge Strips be removed and have them as a line item by its self?</p>  |
|   | <p><b>Response: The ELIN requirement remains unchanged.</b></p>   |
| 6 | <p><b>Question:</b> In Revised Bid Schedule Section A005AG it states to Install .125 Thick Commercial Luxury Vinyl Tile (VCT). Includes stairs and landings, substrate preparation, underlayment leveler, edge strips, and reinstallation of thresholds and wood wall base. Includes Anhydrous Calcium Chloride Moisture Vapor Transmission Tests on concrete decks. Can the Edge Strips be removed and have them as a line item by its self?</p>   |
|   | <p><b>Response: The ELIN requirement remains unchanged.</b></p>   |
| 7 | <p><b>Question:</b> In Revised Bid Schedule Section A005AH it states to Install .080 Thick Commercial Sheet Vinyl Flooring. Includes stairs and landings, substrate preparation, underlayment leveler, edge strips, and reinstallation of thresholds and wood wall base. Includes Anhydrous Calcium Chloride Moisture Vapor Transmission Tests on concrete decks. Can the Edge Strips be removed and have them as a line item by its self?</p>  |
|   | <p><b>Response: The ELIN requirement remains unchanged.</b></p>   |
| 8 | <p><b>Question:</b> In Revised Bid Schedule Section A005AJ it states to Install .125 Thick Commercial Linoleum. Includes stairs and landings, substrate preparation, underlayment leveler, edge strips and reinstallation. of thresholds and wood wall base. Includes Anhydrous Calcium Chloride Moisture Vapor Transmission Tests on concrete decks. Can the Edge Strips be removed and have them as a line item by its self?</p>  |
|   | <p><b>Response: The ELIN requirement remains unchanged.</b></p>   |
| 9 | <p><b>Question:</b> In Amendment No. 002 Part 2 Section 2.1.1 it states that 2.1.1 Manufacturers: Subject to contract compliance and requirements, manufacturers offering products that may be incorporated in to the work include, but are not limited to, those listed below:<br/> Collins and Aikman Floorcoverings, Inc. (<a href="http://www.cafloorcoverings.com">www.cafloorcoverings.com</a>)<br/> Crossley Carpet Mills, Limited (<a href="http://www.crossley.ca">www.crossley.ca</a>)<br/> Interface Company (<a href="http://www.interfaceinc.com">www.interfaceinc.com</a>)<br/> Lees Commercial Carpets Division/Burlington Industries, Inc. (<a href="http://www.leescarpets.com">www.leescarpets.com</a>)<br/> Lowes carpet Corporation (<a href="http://www.basf.com">www.basf.com</a>)<br/> Milliken Contract carpets (<a href="http://www.miliken.com">www.miliken.com</a>)<br/> Mohawk (<a href="http://www.mohawkcarpet.com">www.mohawkcarpet.com</a>)<br/> Patcraft (<a href="http://www.patcraft.com">www.patcraft.com</a>)<br/> Richmond Carpet Mills, Inc. (<a href="http://www.richmondcpt.com">www.richmondcpt.com</a>)<br/> Shaw Contract Group (<a href="http://www.shawcontract.com">www.shawcontract.com</a>)<br/> Chris Craft International Products (Waterford, New York)<br/> Dixie Manufacturing Corporation (Norfolk, Virginia)<br/> All carpet products &amp; Specs being called out on this solicitation are from Collins and Aikman (Tandus) carpet mill. Can you open up the spec so it's not only calling out on Proprietary product from one mill only?</p> |
|   | <p><b>Response: Please see the amended contract requirements for amended changes.</b></p>   |

| <b>Contractor's Request for Information (RFI)</b> |   |
|---|---|
| Contract #: N62473-14-R-2204; Flooring            |   |
| Task Order #: NA                                  |   |
| Contractor:                                       |   |
| Question #  | Contractor Question/Government Response   |
| 1   | <p><b>Question:</b> RFP N62473-14-R-2204 Section 02 41 00 paragraph 1.7.1 Does not address the removal, re-installation, and repositioning of system furniture. Who will be responsible for dismantling, removal, re-installation, and repositioning of system furniture? Please advise.</p> <p><b>Response: Please see Section 02 42 00 "SITE DEMOLOTION" paragraphs 1.7.1 and 1.7.1.1 for amended changes to the contract requirements.</b></p>   |
| 2   | <p><b>Question:</b> Exhibits A-K ELIN A005AC does not identify the yarn face weight. RFP N62473-14-R-2204 section 2.1.3.1 paragraph e states a "maximum" yarn face weight which could be interpreted as allowing a less than desired yarn face weight to be installed with a material bid impact. Please advise.</p> <p><b>Response: Please see Section 09 68 00 "CARPET" for amendments to the contract requirements.</b></p>  |
| 3   | <p><b>Question:</b> Exhibits A-K ELIN A005AD does not identify the yarn face weight. RFP N62473-14-R-2204 section 2.1.3.2 paragraph d states a "maximum" yarn face weight which could be interpreted as allowing a less than desired yarn face weight to be installed with a material bid impact. Please advise.</p> <p><b>Response: Please see Section 09 68 00 "CARPET" for amendments to the contract requirements.</b></p>  |
| 4   | <p><b>Question:</b> Exhibits A-K ELIN A005AE does not identify the yarn face weight. RFP N62473-14-R-2204 section 2.1.3.1 paragraph e states a "maximum" yarn face weight which could be interpreted as allowing a less than desired yarn face weight to be installed with a material bid impact. Please advise.</p> <p><b>Response: Please see Section 09 68 00 "CARPET" for amendments to the contract requirements.</b></p>  |
| 5   | <p><b>Question:</b> Exhibits A-K ELIN A005AG states "Install .125 Thick Commercial Luxury Vinyl Tile (VCT)." Commercial Luxury Vinyl Tile (LVT) and Commercial Vinyl Composition Tile (VCT) are different products. There is not a section in RFP N62473-14-R-2204 addressing Commercial Luxury Vinyl Tile. Also, Att16-CPR.pdf section 09 65 19 Luxury Vinyl Tile states "Luxury vinyl tile should be 3mm gauge". This does not specify commercial or residential quality. Warranty information is not provided. Please advise.</p> <p><b>Response: The thickness requirement for the Commercial Luxury Vinyl Tile remains at 0.125. Please see Section 09 65 19.70 "COMMERCIAL VINYL COMPOSITION TILE, COMMERCIAL LUXURY VINYL TILE AND WALL BASE" for amendments to the contract requirements.</b></p> |

# FLOORING AND ABATEMENT

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### Attachments

1. MCB Camp Pendleton Map
2. Submittal Transmittal
3. Submittal Register
4. Daily Report
5. Contractor Significant Incident Report
6. Contract Discrepancy Report
7. Contract Discrepancy Notice
8. Laydown Lot Rules
9. Instruction for Hazardous & Non-Hazardous Waste Manifest
10. Rework Item List
11. Carpet and Rug Institute Manual CRI-104-2011
12. Safety Inspection Report
13. Quality Control Checklist



## GENERAL REQUIREMENTS

### SECTION 01 11 00

#### SUMMARY OF WORK

01/08

#### **PART 1 GENERAL**

1.1 All work will be located within the boundaries of MCB Camp Pendleton, CA and Naval Weapons Station Seal Beach Fallbrook Detachment, CA.

All work shall be performed and completed in accordance with Federal specifications, applicable codes, industry standards and practices.

1.1.1 The work includes all management, contract administration, quality control management, site safety and health management, training, supervision, home and field office administration, labor, materials, equipment, tests and reports, mobilization and demobilization, deliveries, disposal, associated fees, and other incidental work necessary to remove and install various types of flooring, removal and installation of various components that is associated with installation of flooring, and abatement of Asbestos Containing Materials (ACM) and Lead-Based Paint (LBP). All direct and indirect costs shall be built into each ELIN.

1.1.2 The Contractor, at no cost to the Government, shall conduct a site walk with the responsible Facilities Support Contracts Division (FSC) Planning and Technical Branch Engineering Technician before issuance of a contract task order to verify that the Statement of Work and the potential quantities to be ordered are correct. The Contractor shall conduct the site walk with the Engineering Technician within 3 working days of notification. Verification is not a promise that a task order will be awarded to the Contractor based on the site walk, e.g. the Government may choose to opt to not have the work performed, and therefore the Contractor will not be compensated.

1.1.3 Environmental: No work, staging of materials or mobilization of equipment shall be initiated until a Category Exclusion (CATX) is issued for a task order project. The Contractor shall adhere to all requirements as specified in the CATX.

1.1.4 Unit Priced Labor (UPL) work is defined as IDIQ work that utilizes negotiated labor hours to accomplish a task not required by a pre-priced IDIQ ELIN. A UPL is the unit price bid by the Contractor to provide one performance standard hour of work-in-place. The unit price includes the Davis-Bacon Act hourly wage plus fringe benefits and all direct and indirect costs attributed to the Contractor that is associated with performing one standard hour of work.

1.1.5 Materials and Equipment: The Fixed-Burden Rate is the unit price bid by the Contractor to apply a markup on each type of material or equipment. The FBR is the unit price bid by the Contractor and is the sum of both the prime contractor and subcontractor's markups. Equipment may be defined as a piece of rental equipment required to perform a task or a component of system or piece of equipment. The cost of material and equipment shall be established by the Contractor providing a proposal for each type of material, part, component, or equipment showing the most favorable pricing available and considering the availability of materials and the time constraints of the job and applying the FBR, which upon further negotiations and approval of the Contracting Officer, will become Firm-Fixed Price in a task order. The Government will verify proposed pricing with the Contractor's vendor of choice. The proposed pricing shall include the sum of all indirect and direct costs, all vendor discounts, and rebates for core value or salvage values that accrue to the Contractor, and costs for shipping.

1.1.6 Preparation of Proposals: In response to the Government's RFP, the Contractor shall submit a proposal which details (1) a complete list of all tasks necessary to perform the required scope of work, (2) the number of hours set forth for each tradesman to perform each task, (3) the projected quantities and costs of materials and equipment to perform the required scope of work. The Contractor shall submit a proposal for labor, materials and equipment within 5 working days after notification of the request from the Contracting, which upon negotiations and approval by the Contracting Officer, will become Firm-Fixed Price in a task order.

1.1.7 Warranty Management Plan: The Contractor shall develop a Warranty Management Plan that addresses workmanship and installation warranties, and manufacturer's warranty. The Contractor shall submit the Warranty Management Plan for review and approval by the Contracting Officer within 15-calendar days after award of this contract. Include in the Warranty Management Plan the process by which the Contractor will ensure that the Government receives all warranties to which it is entitled. The plan must be in narrative and with sufficient detail to render it suitable for use by the Facilities Maintenance Department when warranty issues arise. The workmanship and manufacturer's warranty period will begin on the date that the "Final Acceptance Inspection" has been signed off by the Contracting Officer. Include in the Warranty Management Plan the following:

1.4.1.1 Roles and responsibilities of the Contractor's personnel managing the warranty process, including contact telephone numbers for Contractor's personnel.

1.4.1.2 A detailed description of what is included in the warranty, to include the following:

1. Name of item.
2. Location where installed.
3. Company's name point of contacts and phone numbers of manufacturers or suppliers.
4. Warranties and terms of warranty. Include one-year overall warranty for workmanship and installation. Include a minimum of one-year manufacturer's warranty or a most favorable manufacturer's warranty that exceeds a one-year warranty. Items which have extended warranties must be indicate expiration date.
5. Starting point and duration of warranty period.
6. Summary of the required maintenance and preventive maintenance procedures to be performed by others in order to maintain and continue the warranty.
7. Organization, names and phone numbers of persons to call for warranty service.
8. Typical response time and repair time expected for warranted workmanship and installations, and for parts, components, materials and equipment.
9. Procedure for tagging of parts, components, materials and equipment covered by extended warranties, to include the Contractor providing documentation to the Contracting Officer as part of the contract task order closeout submittals .
10. The Contractor shall submit two copies of instructions to the customer for selected pieces of equipment where operation is critical for maintaining the warranty and for safety reasons.

## 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

### SD-01 Preconstruction Submittals

- Submit the contract required submittals as specified in each contract section as specified herein within 15-calendar days after award of this contract. Exception: Submit task order specific required submittals within 5 working days after award of a task order; GA, RO, PO
- Warranty Management Plan; GA, RO, PO

## 1.3 Work Covered By Contract Documents

1.3.1 Contract Drawings

1.3.1.1 Government Furnished Drawings: The Government will furnish drawings, if available, at no cost to the Contractor.

- a. It is the responsibility of the Contractor to check furnished drawings for accuracy. Immediately notify the Government of any discrepancies.

1.3.1.2 The Contractor shall red line Government furnished drawings and submit them as as-built drawings within 15 calendar days after final inspection and acceptance of the task order project. The as-built drawings shall be converted to a pdf file and copied onto CD at no cost to the Government. The Contractor shall deliver one CD to the FSC, one to GIS located at Building 1160, and one to the Facilities Maintenance Department (FMD) Technical Library located at Building 2291. The Contractor shall provide form of written receipt of delivery from each of the clients to the FSC Inspection Branch Engineering Technician.

1.4 Salvage Material and Equipment

1.4.1 Salvageable material and equipment shall become the property of the Contractor and shall be recycled at an approved recycle center. Salvageable material and equipment shall be removed off Base prior to the final inspection of a task order project.

**PART 2 PRODUCTS**

Not used.

**PART 3 EXECUTION**

Not used.

--End of Section--

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## SECTION 01 14 00.05 20

### WORK RESTRICTIONS

05/09

#### PART 1 GENERAL

##### 1.1 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

###### SD-01 Preconstruction Submittals

- List of Contractor Contact Personnel, contract specific; GA, RO, PO
- Personnel List, task order/project specific; GA, RO, PO
- Mobilization Plan, task order/site specific; GA, RO, PO

##### 1.2 Special Scheduling Requirements

1.2.1 The Contractor shall submit a work schedule for each project to the Contracting Officer for approval before mobilization and work may proceed and where interference with normal operations may occur.

1.2.2 Facilities may remain in operation during the construction period. The Contractor shall conduct their operations so as to avoid or cause the least possible interference with normal operations of the activity.

1.2.3 Permission to interrupt any Activity utility services shall be requested in writing a minimum of 21-calendar days prior to the desired date of interruption.

##### 1.3 CONTRACTOR ACCESS AND USE OF PREMISES

###### 1.3.1 Activity Regulations

1.3.1.1 Ensure that Contractor and subcontractor personnel employed on the Activity are familiar with, and obey all Activity regulations and Base Orders, including safety, fire, traffic and security regulations. Keep within the limits of the work and avenues of ingress and egress. Ingress and egress of Contractor vehicles and personnel with RapidGate may use all entrances. Contractor vehicles and personnel with 90 day business passes may use the San Luis Rey, Las Pulgas and San Onofre entrances ONLY. To minimize traffic congestion, delivery of materials shall be outside of peak traffic hours 6:30 to 8:00 a.m. and 3:30 to 5:00 p.m. unless otherwise approved by the Contracting Officer. Do not enter any restricted areas unless required to do so and until cleared for such entry. Equipment shall be conspicuously marked for identification.

1.3.1.2 Contractor Personnel Contact List: Furnish a list of contact Contractor key personnel, to include telephone numbers for use in the event of an emergency. Maintain the list current. Submit revisions to the Contracting Officer within 48-hours regarding any changes in contact key personnel. Note: Subcontractor personnel shall not be included as contact key personnel.

1.3.1.3 Identification Badges: Contractors who are interested in the RAPIDGate® Program should call (877) 727-4342. Business Hours: 6:00 a.m. - 4:00 p.m. Monday-Thursday, CLOSED Fridays. The Contractor Security Section, located at Bldg. 41501T, adjacent to the Las Pulgas Gate.

1.3.1.4 90-day Business Passes for Contractor, subcontractor and vendors who have a need to access the Base and do not participate in RAPIDGate® may be obtained from the Contractor Security Section. A letter from the Employer is required as verification that the individual is currently employed by the company performing work, as well as a letter from the sponsoring unit/section on the Base. A background check is conducted for security purposes at the time of application. Upon successful completion of the background check, the applicant is issued a Business Pass, which may then be used to gain entry onto MCB Camp Pendleton.

1.3.2 No Smoking Policy: Smoking is prohibited within and outside of all buildings on Marine Corps Base Camp Pendleton, except in designated smoking areas. This applies to existing buildings, buildings under construction, and buildings under renovation. Discarding tobacco materials other than into designated tobacco receptacles is considered littering and is subject to fines.

1.3.3 Normal Working Hours: Normal working hours is a 9- 1/2 hour work shift, from 7 a.m. to 4:30 p.m. Monday through Friday, excluding weekends and Federal holidays.

1.3.4 Work Outside Regular Hours: Work outside regular working hours requires Contracting Officer approval. Make application in writing on company letterhead 5-calendar days prior to such work to allow arrangements to be made by the Government for inspecting the work in progress. Provide specific dates, hours, location, type of work to be performed, contract number and task order number. Based on the justification provided, the Contracting Officer may approve work outside regular hours. During periods of darkness, the different parts of the work shall be lighted in a manner approved by the Contracting Officer. The Government will not compensate the Contractor for work outside of normal working hours when it is requested by and at the convenience of the Contractor.

1.3.5 Occupied and Existing Building(s): The Contractor may be required to work in and around existing buildings that are occupied. Do not enter the building(s) without prior approval from the Contracting Officer. Submit an Ingress and Egress Plan (IEP) when the safety of the occupants is at risk. Provide temporary closures to maintain security and safety. Provide dust covers or protective enclosures to protect existing work that remains and Government property located in or around the building(s) or facilities during the construction period. Leave attached equipment in place, and protect it against damage, or temporarily disconnect, relocate, protect, and reinstall it at the completion of the work. The Government may remove and relocate Government property in the areas of the building(s) or facilities scheduled to receive work.

#### 1.3.6 Interruptions

1.3.6.2 Interruption to potable water, sanitary sewer, communication, electric, and HVAC may be limited to pre-determined scheduled outage hours. This time limit includes time for deactivation and reactivation.

1.3.6.3 Operation of Activity Utilities: The Contractor shall not operate nor disturb the setting of control devices in the Activities HVAC and communication systems. The Government will operate the control devices as required for normal conduct of the work. The Contractor shall notify the Contracting Officer giving reasonable advance notice when such operation is required.

### 1.4 SECURITY REQUIREMENTS

1.4.1 Contract Clause "FAR 52.204-2, Security Requirements and Alternate II," "FAC 5252.236-9301, Special Working Conditions and Entry to Work Area."

1.4.2 Employment Restrictions for conducting work on Marine Corps Base Camp Pendleton and Naval Weapons Station Seal Beach, Fallbrook Detachment

1.4.2.1 Submit for approval to the Contracting Officer within 15-calendar days after award of this contract an alphabetical list of personnel who require entry onto MCB Camp Pendleton and Naval Weapons Station Seal Beach, Fallbrook Detachment to perform work requirements during the duration of this contract. The list shall be maintained current. Any subject changes shall be submitted to the Contracting Officer within 48-hours, subject to approval. Furnish for each person:

- a) Name
- b) Date and place of birth
- c) Citizenship\
- d) Social security Number
- e) Current pass expiration date
- f) Naturalization or Alien Registration number
- g) Passport number, place of issue, and expiration date

1.4.2.2 Followed by on company letterhead:

"I hereby certify that all personnel on this list are either born U.S. citizens, naturalized U.S. citizens with the naturalization number shown or legal aliens with the alien registration number indicated."

Signature/Date/Title

## 1.5 EXISTING WORK:

In addition to "FAR 52.236-9, Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements":

1.5.1 Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

1.5.2 Repair or replace portions of existing work which have been altered or damaged during construction operations to match existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work shall be in a condition equal to or better than that which existed before new work started. The Government will not reimburse the Contractor for repair of damaged Government property due to Contractor negligence.

## 1.6 ON-SITE PERMITS

1.6.1 Outage Requests: The Facilities Maintenance Department will coordinate requested outages at their discretion. Work shall be scheduled to hold outages to a minimum and within the time frame specified by the Government.

1.6.1.1 Requests for outages shall be submitted on the Facilities Maintenance Department Outage Request to the Contracting Officer at least 21-calendar days in advance of the need for an outage. Each request shall state the system involved, area of work, approximate duration of the outage, and the nature of work involved.

1.6.1.2 Outages required during the execution of work which affects existing systems shall be arranged and scheduled at the convenience of the Government and may be required to be scheduled outside normal working hours or on weekends.

1.6.1.3 The Contractor is responsible for coordinating outages for all non-government owned utilities.

1.6.2 Locating Coordination: Contractors are required to apply for locating services to locate existing underground utilities a minimum of 21-calendar days in advance of mobilization and staging of materials. The request shall include a site specific drawing of the location. The Contractor shall provide a competent person at the site being located by the

Government. Once the Government has provided locating services, the Contractor shall maintain all markings. The Contractor shall request locating services from DIG ALERT for utilities that are not Government owned. Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Excavation performed with power-driven equipment is not permitted within a two foot radius of a known Government-owned utility, infrastructure or any other subsurface construction. For work immediately adjacent to, or for excavations exposing a utility or other buried obstruction, excavate by hand. Start hand excavation on each side of the utility and continue until the utility is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work that are affected by the excavation until approval for backfill is granted by the Contracting Officer. Report all damage to Government-owned utility, infrastructure or any other subsurface construction immediately to the Contracting Officer.

1.6.3 Welding Permits: Submit Welding Permits 5calendar days prior to scheduled work (Contact Base Fire Marshall). Permits shall be posted at a conspicuous location in the construction area.

## 1.7 GOVERNMENT-FURNISHED MATERIAL AND EQUIPMENT

1.7.1 The Government will not provide materials or equipment in support of ordered work from this contract.

## 1.8 CONTRACTOR FURNISHED IREMS

1.8.1 Portable Toilet: The Contractor shall provide a temporary toilet facility at each work site when Government facilities are not available for Contractor personnel use. Follow the guidelines found in 29 CFR 1926 51(c). The temporary toilet shall come complete with a toilet, urinal and lavatory. The temporary toilet shall be maintained with an adequate supply of toilet paper and paper towels, hand soap, and potable water. The temporary toilet facility shall be disinfected at a minimum on a weekly schedule. Have the black water tank pumped to maintain sanitary conditions for personnel.

1.8.2 Locate the temporary toilet in an area that is accessible by their personnel only. Place the temporary toilet facility on level ground and ensure its stability. Do not place the temporary toilet facility near stormwater drainage basins, in the path of stormwater drainage systems, or where there may be potential of spillage into a United States waterway.

## 1.9 SITE CONDITIONS

1.9.1 The Contractor shall carefully examine the project site, the project drawings and plans, and the specifications to understand the intent of work and to verify the site conditions prior to start of work, and before mobilization and staging of materials.

1.9.2 Differing Site Conditions: During the progress of work, if subsurface or latent physical conditions are encountered at the site differing materially from those as specified in a task order specifications, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work specified in task order specifications are encountered at the site, the Contractor shall immediately notify the Contracting Officer of the specific conditions before the site in question is disturbed and prior to start of work.

1.9.4 Existing Work: In addition to "FAR 52.236-9, Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements":

1.9.4.1 Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work that remain.

1.9.4.2 Repair or replace portions of existing work that have been altered by the Contractor during construction operations. Match the existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work shall be in a condition equal to or better than that which existed before new work started.

## 1.10 MOBILIZATION

1.10.1 The Contractor shall submit a Mobilization Plan to the Contracting Officer within 15-calendar days after award of a task order for review and acceptance. The Contractor shall not mobilize onto a task order project site until the plan has been accepted.

1.10.2 The category exclusion requirements shall be included in the Mobilization Plan. The plan shall include the type of equipment to be used on the project and a site plan where equipment and materials will be staged and stored.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

-- End of Section --

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## **SECTION 01 20 00.00 20**

### **PRICE AND PAYMENT PROCEDURES**

#### **PART 1 GENERAL**

##### **1.1 PAYMENTS TO THE CONTRACTOR**

1.1.1 Payments will be made on submission of itemized requests by the Contractor which comply with the requirements of this section, and will be subject to reduction for overpayments or increase for underpayments made on previous payments to the Contractor.

1.2.1 Obligation of Government Payments: The obligation of the Government to make payments required under the provisions of this contract will, at the discretion of the Contracting Officer, be subject to reductions and/or suspensions permitted under the FAR and agency regulations including the following in accordance with "FAR 32.503-6:

- a. Reasonable deductions due to defects in material or workmanship;
- b. Claims which the Government may have against the Contractor under or in connection with this contract;
- c. Unless otherwise adjusted, repayment to the Government upon demand for overpayments made to the Contractor; and
- d. Failure to provide up to date record drawings not current as stated in Contract Clause "FAC 5252.236-9310, Record Drawings."

1.2.2 Payment for Materials Offsite: Payments may be made to the Contractor for materials stored off construction sites under the following conditions:

- a. Conditions described in the paragraph entitled "Payments to the Contractor";
- b. Material located and stored in the Continental United States;
- c. Materials adequately insured and protected from theft and exposure;
- d. Materials not susceptible to deterioration or physical damage in storage or in transit to the job site are acceptable for progress payments. Items such as non-magnetic steel, aluminum, non-magnetic aggregate, machinery, pre-cast/pre-stressed concrete products, and plastic lumber ( e.g., fender piles and curbs) are acceptable for progress payments;
- e. Conditions specified in FAR 52.232-5(b) PAYMENTS UNDER FIXED PRICE CONSTRUCTION CONTRACTS; and
- f. Payment requests for off-site materials include consent of surety.

#### **PART 2 PRODUCTS**

Not Used

#### **PART 3 EXECUTION**

Not Used

-- End Section --

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**SECTION 01 30 00**

**ADMINISTRATIVE REQUIREMENTS  
02/10**

**PART 1 GENERAL**

**1.1 REFERENCES**

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

**U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)**

|            |                              |
|------------|------------------------------|
| 15 CFR 772 | Definition of Terms          |
| 15 CFR 773 | Special Licensing Procedures |

**1.2 SUBMITTALS**

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

**SD-01 Preconstruction Submittals**

- Certificates of Insurance; GA, RO
- Surety Bonds; GA, RO
- Resume of Project Manager, On-Site Project Superintendent(s), Quality Control Manager(s), and Site Safety and Health Officer; GA, RO, PO
- List of Contractor key personnel; GA, RO, PO
- List of subcontractors; GA, RO, PO
- Approving Authority. Person authorized for signature; GA, RO, PO

**1.3 MINIMUM INSURANCE REQUIREMENTS**

1.3.1 Procure and maintain during the entire period of performance under this contract the following minimum insurance coverage:

1.3.1.1 Comprehensive general liability: \$500,000 per occurrence

1.3.1.2 Automobile liability: \$200,000 per person, \$500,000 per occurrence for bodily injury, \$20,000 per occurrence for property damage

1.3.1.3 Workmen's compensation as required by Federal and State workers' compensation and occupational disease laws.

1.3.1.4 Employer's liability coverage of \$100,000, except in States where workers compensation may not be written by private carriers,

1.3.1.5 Others as required by the great State of California.

#### 1.4 CONTRACTOR AND SUBCONTRACTOR REQUIREMENTS

1.4.1 Submit on company letterhead, the Contractor's company name, upper level management names and titles, company address, email contact address, and contact telephone numbers to the Contracting Officer within 15-calendar days after award of this contract.

1.4.1.1 Submit a list of key management personnel, to include those that have Approving Authority, e.g. personnel authorized for signature, to the Contracting Officer within 15-calendar days after award of this contract or within 5-calendar days of any changes thereof. Subcontractors shall not have signature authority.

1.4.2 Submit for the following on company letterhead: Company names of all subcontractors, key subcontractor management names and titles, and their company address and contact telephone numbers. Submit to the Contracting Officer within 15-calendar days after award of this contract.

1.4.3 Contractor and Subcontractor Personnel: Furnish a list of all Contractor and subcontractor personnel, e.g. foremen, leadmen, crew leader and tradesmen, to include the company that they work for, their trade and pay level (helper, apprentice, and journeyman). As changes occur and additional information becomes available, update the information contained in previous lists. The lists shall be maintained current. Any subject changes to the list, e.g. personnel no longer with the company or newly hired personnel, shall be submitted to the Contracting Officer within 48-hours, subject to approval.

1.4.4 The Contractor shall submit within 15-calendar days after award of this contract a list and resume of each Project Manager (PM) and each On-Site Project Superintendent (PS) that will be managing this contract. The PM's and PS's shall be employed by the Prime Contractor. Each PM and PS shall have completed 30-hour 29 CFR 1926 OSHA Construction Safety Training Certificate Program (certificate required) and shall be responsible ensuring that safety on each project is implemented. Each PM and PS shall have completed or will complete the course entitled "Construction Quality Management for Contractors" within 6-months after award of this contract. New personnel shall complete the course within 6-months after being hired. This course is periodically offered at AGC San Diego, 6212 Ferris Square, San Diego, CA 92121; Call (858) 558-7444. All training shall be maintained current. Submit OSHA training certifications for each PM and PS within 15 calendar days after award of this contract. Submit new or renewal certifications to the Contracting Officer within 5-calendar days upon completion of the training course.

1.4.4.1 The term "On-Site" as used with "On-Site Project Superintendent" shall mean aboard MCB Camp Pendleton and Naval Weapons Station Seal Beach, Fallbrook Detachment. The On-Site Project Superintendent may roam from project site to project site.

1.4.5 Supervision: Supervisors are defined as foremen, leadmen, and crew leaders that required to be on the project site while construction activities are in process. Supervisors may be subcontractor personnel. The Supervisor shall be capable of reading, writing, and conversing fluently in the English language. Each Supervisor shall have completed 30-hour 29 CFR 1926 OSHA Construction Safety Training Certificate Program (certificate required) and may be assigned the responsibility of Competent Person. Submit training certifications for each supervisor within 15 calendar days after award of this contract and within 5-calendar days upon completion or renewal of the training to the Contracting Officer.

#### 1.5 RESPONSIBILITIES

1.5.1 The Project Manager is responsible managing this contract, to include all awarded task orders. The On-Site Project Superintendent is responsible for managing, under the direction of the Project Manager, all awarded task orders. The Project Manager and On-Site Project Superintendent cannot be the same person. Both the Project Manager and On-Site Project Superintendent are subject to removal by the Contracting Officer for non-compliance of the requirements specified herein, and for failure to manage project task orders to ensure quality is produced and projects are completed on schedule. Furthermore, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time for excess costs or damages by the Contractor.

1.5.1.1 The Project Manager is not required to be aboard MCB Camp Pendleton at all times during normal working hours, however the Project Manager must be capable of being on site during normal working hours within one-hour after being notified by the Contracting Officer or the Contracting Officer's representative to address any concerns or issues.

1.5.1.2 The On-Site Project Superintendent must be aboard MCB Camp Pendleton while work is in progress. The On-Site Superintendent must ensure that all task order projects are being performed in accordance with the contract requirements and the approved work schedule. The On-Site Superintendent must also ensure all work is being performed safely, however the ultimate responsibility lies with the SSHO. The On-Site Superintendent may move from one project site to another project site aboard MCB Camp Pendleton and Naval Weapons Station Seal Beach, Fallbrook Detachment.

1.5.2 Contracting Officer approval is required for each Project Manager and each On-Site Project Superintendent prior to start of work on this contract. Submit resumes for each Project Manager and each On-Site Project Superintendent within 15 calendar days after award of this contract or within 5-calendar days of a newly appointed PM or PS. Each resume shall provide a minimum of three years experience in the types of work specified herein, to include references from the past three years and any other qualifications that may enhance the performance of this contract.

1.5.2.1 Subcontractor personnel cannot assume the role of Project Manager, On-Site Project Superintendent, SSHO or QCM.

1.5.3 Each project on a task order must have a Supervisor that is experienced in the work that as specified herein. The supervisor shall be responsible for ensuring that the work is being performed to the contract and task order specifications, work is being performed safely, and has direct communication with the contract On-Site Project Superintendent.

1.5.3.1 The Project Manager, Project Superintendent, QC Manager, and SSHO cannot be a Supervisor.

## 1.6 PREPERFORMANCE CONFERENCE MEETING

1.6.1 The Contractor shall:

1.6.1.1 Schedule with the Contracting Officer a Preperformance Conference Meeting within 15-calendar days after award of this contract.

1.6.1.2 The Preperformance Conference Meeting is conducted by the Contracting Officer. The purpose of the Preperformance Conference Meeting is to develop a partnership, to discuss and develop a mutual understanding of the administration procedures and responsibilities of this contract, to include quality control management, safety, issuance of task orders, scheduling, programming, execution of work and environmental policies.

1.6.1.3 Submit **ALL** contract submittals for review and approval on or before the scheduled date of the Preperformance Conference Meeting.

1.6.1.4 The Contractor shall not mobilize nor perform any work until after the Preperformance Conference Meeting has been conducted and all submittals have been reviewed and accepted by the Contracting Officer.

1.6.2 Task Order Preconstruction Meetings

1.6.2.1 The Contractor shall schedule Task Order Preconstruction Meetings with the Contracting Officer for each project on an awarded task order within 15-calendar days after of a task order.

1.6.2.2 The Contractor shall submit a Work Plan, Work Schedule and any task order specified submittals at the time the meeting is conducted. The Work Plan shall take into consideration all environmental concerns as specified in the issued CATX. The Work Plan, Work Schedule and submittals are subject to approval by the Contracting Officer before mobilization, staging of materials, or work can begin.

1.6.2.3 The Contractor shall not mobilize nor perform any work until after the Task Order Preperformance Conference Meeting has been conducted and all task order specific submittals have been reviewed and accepted by the Contracting Officer.

## 1.7 PARTNERING

1.7.1 Level C Partnering: To most effectively accomplish this contract, the Government requires the formation of a cohesive partnership with the Contractor and its subcontractors. The partnership will draw on the strength of each organization in an effort to achieve best management practices, and a quality project done right the first time, within the budget, on schedule, and without any safety mishaps. This level of partnering discusses partnering concepts and benefits. The Contracting Officer and senior Contractor representative present will jointly host the partnering sessions. The partnering sessions shall be held annually. Partnering sessions shall be held at the Facilities Support Contracts Division Conference Room. The participants shall bear their own costs for meals, lodging, and transportation associated with partnering.

1.7.1.1 The Contractor shall initiate, coordinate and schedule Partnering Meetings with the Contracting Officer every quarter. It is the responsibility of the Contractor to obtain email addresses for notification of all participants. The Contractor is responsible for coordinating and scheduling the meeting (date and time) and for sending out in advance an agenda of the topics of discussion to be discussed at the meeting.

1.7.1.2 Invitees include the Contracting Officer, Contract Specialist, FSC Director, Facilities Support Contracts Manager, Engineering Technicians, Construction representatives, FSC Administrative Supervisor, Planning and Technical Branch Supervisor and the Technical Writer.

## 1.8 ELECTRONIC MAIL (E-MAIL) ADDRESS

1.8.1 The Contractor shall establish and maintain electronic mail (e-mail) capability along with the capability to open various electronic attachments in Microsoft applications, Adobe Acrobat, and other formats acceptable to and used by the Government. Within 15 calendar days after contract award of this contract, the Contractor shall submit to the Contracting Officer e-mail addresses of all management personnel for electronic communications. The communication highway includes, but is not limited to, sending contract documents, invoice information, request for proposals (RFP), request for information (RFI), reports, requests, and other correspondence. The Contracting Officer may also use email to notify the Contractor of Base access conditions when emergency conditions warrant, such as inclement weather, terrorist threats, etc. Multiple e-mail addresses of personnel will not be allowed.

1.8.2 It is the Contractor's responsibility to make timely distribution of all Contracting Officer initiated e-mail within their own organization, including field offices. The Contractor shall submit within 5-calendar days any changes to personnel email addresses to the Contracting Officer.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used

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**SECTION 01 32 01.00 10**

**PROJECT SCHEDULE**

**08/08**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

**SD-01 Preconstruction Submittals**

- Work Plan and Project Schedule, for each task order and project specific; GA, RO, PO

**1.2 ACCEPTANCE**

1.2.1 Prior to the start of work, prepare and submit to the Contracting Officer for acceptance a construction schedule in the form of a Bar Chart in accordance with the terms in Contract Clause "FAR 52.236-15, Schedules for Construction Contracts."

**1.3 SCHEDULE FORMAT**

1.3.1 Bar Chart Schedule: The Bar Chart shall show submittals, government review periods, material/equipment delivery, utility outages, on-site construction scheduling, inspection, testing, and closeout activities. The Bar Chart shall be time scaled and generated using an electronic format compatible with the Government's software.

**1.4 UPDATED SCHEDULES**

1.4.1 Update the Construction Schedule at bi-monthly intervals or when the schedule has been revised. The updated schedule shall be kept current, reflecting actual activity progress and a plan for completing the remaining work.

1.4.2 Submit copies of material and equipment purchase orders that may delay progress, to include original invoice from the ordering vendor, date of the order and confirmation of delivery dates.

**1.5 CORRESPONDENCE AND TEST REPORTS**

1.5.1 All correspondence (e.g., letters, Requests for Information (RFIs), e-mails, meeting minute items, Production and QC Daily Reports, material delivery tickets, photographs, etc. shall reference the scheduled activities that are being addressed.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not used.

-- End Section --

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## SECTION 01 33 00

### SUBMITTAL PROCEDURES

02/10

#### PART 1 GENERAL

##### 1.1 SUBMITTAL DESCRIPTION

1.1.1 herein, the terms “provide” and “submit” are used interchangeably when a submittal is required.

1.1.2 Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

##### SD-01 Preconstruction Submittals

Submittals which are required prior to a notice to proceed commencing work on this contract. Schedules or tabular list of data or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the performance of work on this contract, submitted prior to contract notice to proceed.

- Certificates of insurance
- Surety bonds
- List of proposed subcontractors
- List of proposed products
- Construction Progress Schedule
- Submittal Register
- Health and Safety Plan
- Accident Prevention Plan
- Construction/Work Schedule
- Quality Control(QC) Plan
- Environmental Protection Plan

##### SD-03 Product Data

- Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.
- Samples of warranty language when the contract requires extended product warranties.

##### SD-04 Samples

- Fabricated or unfabricated physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

- Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

#### SD-05 Design Data

- Design calculations, mix designs, analyses or other data pertaining to a part of work.
- Design submittals, design substantiation submittals and extensions of design submittals.

#### SD-06 Test Reports

- Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for this contract.)
- Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work.
- Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.
- Investigation reports.
- Daily logs and checklists.
- Final acceptance test and operational test procedure.

#### SD-07 Certificates

- Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.
- Document required of Contractor, or of a manufacturer, supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.
- Confined space entry permits, when applicable.
- Text of posted operating instructions.

#### SD-08 Manufacturer's Instructions

- Preprinted material describing installation of a product, system or material, including special notices and Material Safety Data sheets concerning impedances, hazards and safety precautions.

#### SD-09 Manufacturer's Field Reports

- Documentation of the testing and verification actions taken by manufacturer's representative at the job site, in the vicinity of the job site, or on a sample taken from the job site, on a portion of the work, during or after installation, to confirm compliance with manufacturer's standards or instructions. The documentation must be signed by an authorized official of a testing laboratory or agency and must state the test results; and indicate whether the material, product, or system has passed or failed the test.

- Factory test reports.

#### SD-10 Operation and Maintenance Data

- Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel, including manufacturer's help and product line documentation necessary to maintain and install equipment. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.
- This data is intended to be incorporated in an operations and maintenance manual or control system.

#### SD-11 Closeout Submittals

- Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.
- Special requirements necessary to properly close out a construction contract. For example, as-built shop drawings.

1.1.3 Approving Authority: Facilities Support Contracting Office Manager and Facilities Support Contracts Engineering Technicians are authorized to approve submittals.

1.1.4 Work: As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

### 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

- See Section 01 11 00, "SUMMARY."

### 1.3 SUBMITTAL CLASSIFICATION

1.3.1 Submittals are classified as follows:

1.3.1.1 Designer of Record Approved (DA): Designer of Record (DOR) approval is required for design changes, critical materials, any deviations from the contract required submittals, the accepted proposal, or the equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "Shop Drawings." The Contractor shall submit to the Contracting Officer three of copies DOR approved submittals 15-calendar days prior to incorporating any item or design into a construction project. The Contracting Officer will review and approve all Designer of Record approved submittals that deviate from the requirements found in the contract sections and the accepted contract submittals. Incorporation of items or design shall not begin until Contracting Officer approval. Generally, design submittals should be identified as SD-05 Design Data submittals.

1.3.1.2 Government Approved (GA): Government approval is required for design changes, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Contracting Officer approval is required for any deviations from the technical requirements found in this contract

and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "Shop Drawings."

1.3.1.3 Government Conformance Review of Design (CR): The Government will review all intermediate submittals for conformance with the technical requirements of this contract. Review will be only for conformance with the applicable codes, standards and contract requirements.

### 1.3.2 Designer of Record Approved/Government Conformance Review (DA/CR)

1.3.2.1 Deviations to the Accepted Design: Designer of Record approval and the Government's concurrence are required for any proposed deviation from accepted designs which complies with the contract before the Contractor is authorized to proceed with material acquisition or installation. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction", they are considered to be "Shop Drawings." If necessary to facilitate the project schedules, the Contractor and the DOR may discuss a submittal proposing a deviation with the Contracting Officer's Representative prior to officially submitting it to the Government. However, the Contracting Officer reserves the right to review the submittal before providing an opinion, if deemed necessary. In any case, the Contracting Officer will not formally agree to or provide a preliminary opinion on any deviation without the DOR's approval or recommended approval. The Contracting Officer reserves the right to non-concur with any deviation from the design, which may impact furniture, furnishings, equipment selections or operations decisions that were made, based on the reviewed and concurred design.

#### a. Substitutions

- 1) Unless prohibited or provided for otherwise elsewhere in this Contract, where the accepted contract proposal named products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification, and the Contractor desires to substitute manufacturer or model after award, submit a requested substitution for Contracting Officer concurrence. Include substantiation, identifying information and the DOR's approval, as meeting the contract requirements and that it is equal in function, performance, quality and salient features to that in the accepted contract proposal.

1.3.3 Designer of Record Approved/Government Approved (DA/GA): In addition to the above stated requirements for proposed deviations to the accepted design, both Designer of Record and Contracting Officer Approval and, where applicable, a contract modification are required before the Contractor is authorized to proceed with material acquisition or installation for any proposed deviation to this contract (the solicitation and/or the accepted proposal), which constitutes a change to the contract terms. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction", they are considered to be "Shop Drawings". The Government reserves the right to accept or reject any such proposed deviation at its discretion.

1.3.4 Information Only: Submittals not requiring Contracting Officer approval will be for information only.

## 1.4 FORWARDING SUBMITTALS REQUIRING GOVERNMENT APPROVAL

### 1.4.1 Submittals Required from the Contractor

1.4.1.1 The Contractor shall submit all of the submittals as required in each General and Technical section of this contract within 15-calendar days after award of the contract to the Contracting Officer for review and approval. Do not mobilize, stage equipment or materials, nor begin work on any project until all of the submittals have been accepted and approved by the Contracting Officer. Include shop drawings, product data and samples as part of the submittal package.

#### 1.4.1.2 O&M Data

- a. The Contractor shall submit a one hard copy of O&M data to the Contracting Officer for review within 15-calendar days after a task order has been inspected and accepted.

- b. The Contracting Officer will review and approve O&M Data to verify the submittals comply with the contract requirements. Upon acceptance and approval by the Contracting Officer, the Contractor shall deliver on CD and in pdf format, one copy to GIS located in Building 1160, one copy to Facilities Maintenance Department's Technical Library located in Building 2291, and one copy to the FSC Inspection Branch.
- c. In the event the Contractor fails to deliver O&M Data within the time limits specified, the Contracting Officer may withhold from progress payments 50 percent of the price of the item with which such O&M Data are applicable.

## 1.5 PREPARATION

1.5.1 Transmittal Form: Transmit each submittal, except sample installations and sample panels to office of approving authority. Transmit submittals with transmittal form prescribed by Contracting Officer and standard for this contract. On the transmittal form identify Contractor, indicate date of submittal, and include information prescribed by transmittal form and required in paragraph entitled "Identifying Submittals." Process transmittal forms to record actions regarding samples and panels.

### 1.5.2 Identifying Submittals

1.5.2.1 When submittals are provided by a Subcontractor, the Prime Contractor is to prepare, review and stamp with Contractor's approval all specified submittals prior to submitting for Government approval.

1.5.2.2 Identify submittals, except sample installations and sample panels, with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form. Mark each copy of each submittal identically, with the following:

- a. Project title and location (Location will be MCB Camp Pendleton).
- b. Construction contract number.
- c. Name, address, and telephone number of subcontractor, supplier, manufacturer and any other subcontractor associated with the submittal.
- d. Section number of the specification section by which submittal is required.
- e. Submittal description (SD) number of each component of submittal.
- f. When a resubmission, add alphabetic suffix on submittal description, for example, submittal 18 would become 18A, to indicate resubmission.
- g. Product identification and location in project.

### 1.5.3 Format for SD-02 Shop Drawings

Not required.

### 1.5.4 Format of SD-03 Product Data and SD-08 Manufacturer's Instructions

1.5.4.1 Present product data for each submittal requirement found in the technical sections in this contract as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.

1.5.4.2 Indicate, by prominent notation, each product which is being submitted; indicate technical section number and paragraph number to which it pertains.

1.5.4.3 Supplement product data with material prepared for contract task order specific projects to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project, with information and format as required for submission of SD-07 Certificates.

1.5.4.4 Provide product data in metric dimensions. Where product data are included in preprinted catalogs with English units only, submit metric dimensions on separate sheet.

1.5.4.5 Provide product data in metric dimensions. Where product data are included in preprinted catalogs with English units only, submit metric dimensions on separate sheet.

1.5.4.6 Include the manufacturer's name, trade name, place of manufacture, and catalog model or number on product data. Also include applicable Federal, military, industry and technical society publication references. Should manufacturer's data require supplemental information for clarification, submit as specified for SD-07 Certificates.

1.5.4.7 Where equipment or materials are specified to conform to industry and technical society reference standards of the organizations such as American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), and Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

1.5.4.8 Collect required data submittals for each specific material, product, unit of work, or system into a single submittal and marked for choices, options, and portions applicable to the submittal. Mark each copy of the product data identically. **Partial submittals will not be accepted.**

1.5.4.9 Submit manufacturer's instructions prior to installation.

#### 1.5.5 Format of SD-04 Samples

1.5.5.1 Furnish samples in sizes below, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately same size as specified:

- a. Sample of Equipment or Device: Full size.
- b. Sample of Materials Less Than 2 by 3 inches: Built up to 8 1/2 by 11 inches.
- c. Sample of Materials Exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.
- d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.
- e. Sample of Non-Solid Materials: Pint. Examples of non-solid materials are sand and paint.
- f. Color Selection Samples: 2 by 4 inches. Where samples are specified for selection of color, finish, pattern, or texture, submit the full set of available choices for the material or product specified. Sizes and quantities of samples are to represent their respective standard unit.
- g. Samples Showing Range of Variation: Where variations in color, finish, pattern, or texture are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range. Mark each unit to describe its relation to the range of the variation.

- h. Reusable Samples: Incorporate returned samples into work only if so specified or indicated. Incorporated samples are to be in undamaged condition at time of use.
- i. Recording of Sample Installation: Note and preserve the notation of area constituting sample installation but remove notation at final clean up of project.
- j. When color, texture or pattern is specified by naming a particular manufacturer and style, include one sample of that manufacturer and style, for comparison.

#### 1.5.6 Format of SD-05 Design Data and SD-07 Certificates

1.5.6.1 Submit design data and certificates in 8-1/2 x 11 inches for each submittal requirement found in the technical sections in this contract as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.

#### 1.5.7 Format of SD-06 Test Reports and SD-09 Manufacturer's Field Reports

1.5.7.1 Submit test reports and manufacturer's field reports in 8-1/2 x 11 inches for each submittal requirement found in the technical sections in this contract as a complete, bound volume.

1.5.7.2 Indicate by prominent notation, each report in the submittal. Indicate specification number and paragraph number to which it pertains.

#### 1.5.8 Format of SD-10 Operation and Maintenance Data (O&M)

1.5.8.1 Comply with the requirements specified for OPERATION AND MAINTENANCE DATA for O&M Data format.

#### 1.5.9 Format of SD-01 Preconstruction Submittals and SD-11 Closeout Submittals

1.5.9.1 When submittal includes a document which is to be used in project or become part of project record, other than as a submittal, do not apply Contractor's approval stamp to document, but to a separate sheet accompanying document.

1.5.9.2 Provide all dimensions in administrative submittals in metric. Where data are included in preprinted material with English units only, submit metric dimensions on separate sheet.

### 1.6 QUANTITY OF SUBMITTALS

#### 1.6.1 SD-01 Preconstruction Submittals

1.6.1.1 Submit two hard copies of each submittal for review and acceptance by the Contracting Officer. Upon acceptance by the Contracting Officer, one copy of each accepted submittals will be returned to the Contractor. The Contractor shall scan the accepted submittals, copy them onto CD and deliver one copy to the Contracting Officer, one copy to the FSC Inspection Branch and one copy to the FSC technical Writer.

#### 1.6.2 Number of Copies of SD-02 Shop Drawings

Not required.

#### 1.6.3 Number of Copies of SD-03 Product Data and SD-08 Manufacturer's Instructions

1.6.3.1 Submit one hard copy of each product data and manufacturer's instruction as a submittal to the Contracting Officer for review and acceptance. Upon acceptance by the Contracting Officer, one copy of each accepted submittal will

be returned to the Contractor. The Contractor shall scan the accepted submittals, copy them onto CD and deliver one copy to the Contracting Officer, one copy to the FSC Inspection Branch and one copy to the FSC technical Writer.

#### 1.6.4 Number of Samples SD-04 Samples

1.6.4.1 Submit three samples, or three sets of samples showing range of variation, of each required item for review and acceptance of the Contracting Officer within 15-calendar days after award of this contract. Upon Contracting Officer acceptance, one sample or set of samples will be retained by FSC Inspection Branch, one sample or set of samples will be retained by FSC Planning and Technical Branch and one will be returned to Contractor.

#### 1.6.4 Number of Copies SD-05 Design Data and SD-07 Certificates

1.6.4.1 Submit one hard copy of each submittal for design data and certificates requiring review and accepted by the Contracting Officer. Upon acceptance by the Contracting Officer, one copy of each accepted submittal will be returned to the Contractor. The Contractor shall scan the accepted submittals, copy them onto CD and deliver one copy to the Contracting Officer, one copy to the FSC Inspection Branch and one copy to the FSC technical Writer.

#### 1.6.5 Number of Copies SD-06 Test Reports and SD-09 Manufacturer's Field Reports

1.6.5.1 Submit two hard copies of each test report and manufacturer's field report to the Contracting Officer within 5-calendar days after the test has been performed.

#### 1.6.6 Number of Copies of SD-10 Operation and Maintenance Data

1.6.6.1 Submit one hard copy of each submittal Operations and Maintenance (O&M) Manual to the Contracting Officer for review and approval. The Contractor shall scan the accepted submittals, copy them onto CD and deliver one copy to the Contracting Officer, one copy to the FSC Inspection Branch and one copy to the FSC technical Writer.

#### 1.6.7 Number of Copies of SD-01 Preconstruction Submittals and SD-11 Closeout Submittals

1.6.7.1 Submit two hard copies to the Contracting Officer for review and acceptance. The Contractor shall scan the accepted submittals, copy them onto CD and deliver one copy to the Contracting Officer, one copy to the FSC Inspection Branch and one copy to the FSC technical Writer.

### 1.7 VARIATIONS / SUBSTITUTION REQUESTS

1.7.1 Variations from the contract technical requirements require Contracting Officer approval pursuant to contract Clause FAR 52.236-21 and will be considered where advantageous to Government.

#### 1.7.2 Considering Variations

1.7.2.1 Discussion with Contracting Officer prior to submission will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

1.7.2.2 Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Contracting Officer requiring rejection and removal of such work at no additional cost to the Government.

1.7.3 Proposing Variations: When proposing variation, deliver a written request on company letterhead to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government. Proposed substitute material and equipment that meets the requirements as specified in the technical sections of this contract and which can be purchased at a lower cost at a benefit to the Contractor will not be

accepted. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

1.7.5 Warranting That Variations Are Compatible: When delivering a variation for approval, Contractor warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.7.6 Review Schedule Is Modified: In addition to normal submittal review period, a period of 10 working days will be allowed for consideration by the Contracting Officer of submittals with variations.

## 1.8 SUBMITTAL REGISTER

1.8.1 Prepare and maintain submittal register, as the work progresses. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by Government; retain data which is output in columns (a), (g), (h), and (i) as approved. A submittal register showing items of equipment and materials for which submittals are required by the specifications is provided in Attachment "A." This list may not be all inclusive and additional submittals may be required. The Government will provide the initial submittal register in electronic format with the following fields completed, to the extent that will be required by the Government during subsequent use.

- a. Column (c): Lists specification section in which submittal is required.
- b. Column (d): Lists each submittal description (SD No. and type, e.g. SD-02 Shop Drawings) required in each specification section.
- c. Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.
- d. Column (f): Indicate approving authority for each submittal.

1.8.1.1 Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns, including dates on which submittals are received and returned by the Government.

### 1.8.2 Use of Submittal Register

1.8.2.1 Submit submittal register. Submit with QC Plan and project schedule. Verify that all submittals required for project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

- a. Column (a) Activity Number: Activity number from the project schedule.
- b. Column (g) Contractor Submit Date: Scheduled date for approving authority to receive submittals.
- c. Column (h) Contractor Approval Date: Date Contractor needs approval of submittal.
- d. Column (i) Contractor Material: Date that Contractor needs material delivered to Contractor control.

### 1.8.3 Contractor Use of Submittal Register

1.8.3.1 Update the following fields in the Government-furnished submittal register program or equivalent fields in program utilized by Contractor with each submittal throughout contract.

- a. Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

- b. Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.
- c. Column (l) List date of submittal transmission.
- d. Column (q) List date approval received.

#### 1.8.4 Approving Authority Use of Submittal Register

##### 1.8.4.1 Update the following fields in the Government-furnished submittal register program:

- a. Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.
- b. Column (l) List date of submittal receipt.
- c. Column (m) through (p) List Date related to review actions.
- d. Column (q) List date returned to Contractor.

#### 1.8.5 Contractor Action Code and Action Code

##### 1.8.5.1 Entries for columns (j) and (o), are to be used are as follows (others may be prescribed by Transmittal Form):

- a. NR - Not Received
- b. AN - Approved as noted
- c. A - Approved
- d. RR - Disapproved, Revise, and Resubmit

#### 1.8.6 Copies Delivered to the Government

##### 1.8.6.1 Deliver one copy of submittal register updated by Contractor to Government with each invoice request.

### 1.9 SCHEDULING

1.9.1 Within 15-calendar days after award of this contract, submit to the Contracting Officer concurrently submittals as specified in the General and Technical sections of this contract. No delay damages or time extensions will be allowed for time lost in late submittals.

1.9.1.1 Coordinate scheduling, sequencing, preparing and processing of submittals to coincide with the scheduled Contract Preperformance Conference Meeting.

1.9.1.2 Submittals specified in the contract General and technical sections will be listed on the register. If a submittal is called for, but does not pertain to the contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract sections, but which have been omitted from the register or marked "N/A".

1.9.1.3 Re-submit a new register with actual submission and approval dates. When all items on the register have been fully approved, no further re-submittal is required.

1.9.1.4 Except as specified otherwise, allow review period, that includes at least 5 working days for submittals for the Contractor's QC Manager's approval, and 15 calendar days for review and approval by the Contracting Officer. Period of

review for submittals with Contracting Officer approval begins when the complete submittal package is received from Contractor's QC organization.

1.9.1.5 For submittals requiring review by fire protection engineer, allow review period, beginning when the Contracting Officer receives the submittal package from the Contractor's QC organization, of 30 calendar days for review, approval and return of submittal to the Contractor.

1.9.2 Reviewing, Certifying, Approving Authority: The QC organization is responsible for reviewing and certifying that submittals are in compliance with the contract General and Technical section requirements. Approving authority on submittals is QC Manager unless otherwise specified for specific submittal. At each "Submittal" paragraph in individual specification sections, a notation "GA, RO, PO" or "GA, RO, PO" following a submittal item, indicates the Contracting Officer and Facilities Support Contracts (FSC) Office are the approving authority for that submittal item.

### 1.9.3 Constraints

1.9.3.1 Conform to provisions of this section, unless explicitly stated otherwise for submittals listed or specified in this contract.

1.9.3.2 Submit complete submittals for each General or Technical section requirement.

### 1.9.4 QC Organization Responsibilities

1.9.4.1 Note date on which submittal was received from Contractor on each submittal.

1.9.4.2 Review each submittal and verify that the submittal is in conformance and compliance with the General and Technical section requirements specified in this contract.

1.9.4.3 Act on submittals, determining appropriate action based on QC organization's review of submittal.

- a. When QC Manager is approving authority, take appropriate action on submittal from the possible actions defined in paragraph entitled, "Actions Possible."
- b. When Contracting Officer is approving authority or when variation has been proposed, forward submittal to the Contracting Officer with a certifying statement or return submittal marked "not reviewed" or "revise and resubmit" as appropriate. The QC organization's review of submittal determines appropriate action.

1. Ensure that material is clearly legible.

2. Stamp each sheet of each submittal with QC certifying statement or approving statement, except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only.

- a. When approving authority is Contracting Officer, QC organization will certify submittals forwarded to Contracting Officer with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with contract Number [\_\_\_\_], is in compliance with the contract drawings and specification, can be installed in the allocated spaces, and is submitted for Government approval.

Certified by Submittal Reviewer \_\_\_\_\_, Date \_\_\_\_\_  
(Signature when applicable)

Certified by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

- b. When approving authority is QC Manager, QC Manager will use the following approval statement when returning submittals to Contractor as "Approved" or "Approved as Noted."

"I hereby certify that the (material) (equipment) (article) shown and marked in this submittal and proposed to be incorporated with contract Number [\_\_\_\_], is in compliance with the contract drawings and specification, can be installed in the allocated spaces, and is approved for use.

Certified by Submittal Reviewer \_\_\_\_\_, Date \_\_\_\_\_  
(Signature when applicable)

Approved by QC Manager \_\_\_\_\_, Date \_\_\_\_\_"  
(Signature)

3. Sign certifying statement or approval statement. The QC organization member designated in the approved QC plan is the person signing certifying statements. The use of original ink for signatures is required. Stamped signatures are not acceptable.
4. Update submittal register as submittal actions occur and maintain the submittal register at project site until final acceptance of all work by Contracting Officer.
5. Retain a copy of approved submittals at project site, including Contractor's copy of approved samples.

## 1.10 GOVERNMENT APPROVING AUTHORITY

1.10.1 When the approving authority is the Contracting Officer, the Government will:

- a. Note the date on which submittal was received from QC Manager.
- b. Review the General and Technical section submittals for approval within 15-calendar days after receipt of them from the QC Manager and for task order specific submittals within 5-calendar days after receipt of them from the QC Manager. Re-submitted submittals will have the same review time as stated above.
- c. Identify returned submittals with one of the actions defined in paragraph entitled "Review Notations" and with markings appropriate for action indicated.

1.10.1.1 Upon completion of review of submittals requiring Contracting Officer acceptance, stamp and date approved submittals, a minimum of two copies of the accepted submittals will be retained by the Contracting Officer and one copy of the submittal will be returned to the Contractor.

1.10.2 Review Notations: Contracting Officer review will be completed within 15-calendar days after date of submission. Submittals will be returned to the Contractor with the following notations:

1.10.2.1 The Contractor will be allowed to mobilize, stage materials and equipment, and begin work when all of the submittals have been marked "approved" or "accepted."

1.10.2.2 Submittals marked "not approved" or "disapproved," or "revise and resubmit," indicate noncompliance with the contract requirements or that the submittal is incomplete. Resubmit with appropriate changes. Mobilization, staging of materials and equipment and work shall not proceed until all submittals as a complete package have been approved.

## 1.11 DISAPPROVED OR REJECTED SUBMITTALS

1.11.1 Contractor shall make corrections specified by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract specifications; a written explanation is to be

submitted to the Contracting Officer as required under the clause entitled, "Changes." Failure to point out deviations may result in the Contracting Officer requiring rejection of the submittal at the Contractor's expense.

1.11.1.1 If changes are necessary to submittals, the Contractor shall make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are accepted.

#### 1.12 APPROVED/ACCEPTED SUBMITTALS

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

#### 1.13 ACCEPTED SAMPLES

1.13.1 Acceptance of a sample is only for the characteristics or use named in such acceptance and is not be construed to change or modify any of the contract technical requirements. Before submitting samples, the Contractor shall assure that the materials or equipment will be available in quantities required throughout the duration of this contract. No change or substitution will be permitted after a sample has been accepted.

1.13.2 Match the accepted samples for materials and equipment incorporated in the work. If requested, accepted samples, including those which may be damaged in testing, will be returned to the Contractor, at their expense. Samples not accepted will also be returned to the Contractor at their expense, if so requested.

1.13.3 Failure of any materials or equipment to pass specified tests as found in the technical section requirements in this contract will be sufficient cause for refusal for use under this contract. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service. Samples of various materials or equipment delivered on a task order project site or in place may be taken by the Contracting Officer for testing. Samples failing to meet the contract requirements will automatically void previous approvals. The Contractor shall replace such materials or equipment to meet contract technical requirements. Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of their responsibilities under the contract.

### **PART 2 PRODUCTS**

Not Used

### **PART 3 EXECUTION**

Not Used

-- End Section --

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## SECTION 01 35 26

### GOVERNMENTAL SAFETY REQUIREMENTS

#### PART 1 GENERAL

##### 1.1 REFERENCES

#### ARMY CORPS OF ENGINEERS MANUAL (COE)

COE EM-385-1-1 ( 2008) Safety and Health Requirements Manual  
<http://www.hq.usace.army.mil/soh/hqusace-soh.htm>

#### OCCUPATIONAL SAFETY AND HEALTH (OSHA)

29 CFR 1904 Recording and Reporting Occupational Injuries and Illnesses

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

29 CFR 1910.146 Permit-required Confined Spaces

29 CFR 1926 Safety and Health Regulations for Construction

29 CFR 1926.65 Hazardous Waste Operations and Emergency Response Subpart M, Fall Protection

49 CFR 171 General Information, Regulations, and Definitions

49 CFR 172 Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements

#### AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A10.14 Construction and Demolition Operations - Requirements for Safety Belts, Harnesses, Lanyards and Lines for Construction and Demolition Use

ANSI Z359.1 Safety Requirements for Personal Fall Arrest Systems

#### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 1 Portable Fire Extinguishers

NFPA 7 National Electric Code

## 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

### SD-01 Preconstruction Submittals

- Site Safety and Health Officer (SSHO) resume and certifications; GA, RO, PO
- Site Safety and Health Plan (SSHP), contract specific; GA, RO, PO
- Competent Person, task order/project specific; GA, RO, PO
- Accident Prevention Plan (APP), contract specific; GA, RO, PO
- Activity Hazard Analysis (AHA), for each task on an awarded task order/site specific; GA, RO, PO
- Safety Inspection Report, submit with the Contractor's Daily Production Report, task order/site specific; GA, RO, PO

## 1.3 DEFINITIONS AND TERMINOLOGY

1.3.1 Recordable Occupational Injuries or Illnesses: Any occupational injuries or illnesses that results in a serious injury, lost workday cases, non-fatal cases or significant mishaps.

1.3.2 Serious Injuries: Fatalities, regardless of the time between the injury and death, or the length of the illness; hospitalization of three or more employees and property damage in excess of \$200,000.

1.3.3 Lost Workday Cases: Injuries other than fatalities that result in lost workdays.

1.3.4 Non-Fatal Cases: Cases without lost workdays which result in transfer to another job or termination of employment, or require medical treatment (other than first aid) or involve property damage in excess of \$10,000 but less than \$200,000 or involve: loss of consciousness or restriction of work or motion. This category also includes any diagnosed occupational illnesses that are reported to the employer, but are not classified as fatalities or lost workday cases.

1.3.5 Significant Contractor Mishap: Any Contractor mishap which involves falls of 4 feet or more, electrical mishaps, confined space mishaps, diving mishaps, crane mishaps, trenching/entrapment mishaps, hazardous material/hazardous waste mishaps, equipment mishaps, and fire mishaps which result in a lost time injury, or property damage of \$10,000 or more, but less than \$200,000; or when fire department or emergency medical treatment (EMT) assistance is required.

1.3.6 Medical Treatment: Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered professional personnel.

1.3.7 First Aid: Any one-time treatment, and any follow-up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care. Such one-time treatment, and follow-up visit for the purpose of observation, is considered first aid even though provided by a physician or registered professional personnel.

1.3.8 Lost Workdays: The number of days (consecutive or not) after, but not including, the day of injury or illness during which the employee would have worked but could not do so; that is, could not perform all or any part of his normal assignment during all or any part of the workday or shift, because of the occupational injury or illness.

## 1.4 REGULATORY REQUIREMENTS

1.4.1 In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with most current edition of the USACE EM 385-1-1, Federal and Great State of California OSHA and all other local safety regulations. Submit matters of interpretation of standards to the Contracting Officer for resolution before mobilization, staging of materials and equipment or commencing work.

### 1.4 SITE SAFETY AND HEALTH OFFICER QUALIFICATION AND RESPONSIBILITIES

1.4.1 Personnel Qualifications: Site Safety and Health Officer (SSHO) Personnel Qualifications: The SSHO is responsible for the overall safety and occupational health management, employee safety training and administration, and safety inspection and enforcement throughout the duration of this contract. The assignment of the SSHO contractually does not relieve the Contractor from regulatory safety requirement responsibility. The Contractor Quality Control (QCM) Manager, acting on behalf of and under the SSHO's guidance, may have the collateral responsibility of enforcing safety on the project sites. The QCM shall have completed and be certified in the applicable OSHA training and complete annual formal training as required of the SSHO. The SSHO or QCM may, when multiple projects are in progress, rove from one project site to another project site within the Activities boundaries. The SSHO or CQM must visit each project in progress on a daily basis, to enforce safety, document all safe and unsafe activities, and take corrective measures for unsafe working practices or conditions.

1.4.1.1 The SSHO shall meet the following Level 3 requirements:

1. A minimum of 5-years safety work on similar size projects;
2. Has completed the 30-hour 29 CFR 1926 OSHA Construction Safety Training Certificate Program, certificate required;
3. Has completed the 40-hour Army Corps of Engineers EM-385-1-1 Training Program, certificate required;
4. Has attended an average of 24-hours of annual formal safety training for each year for the past 3-years.

### 1.4.2 Personnel Duties

1.4.2.1 In addition to the duties required in EM 385-1-1, the SSHO, or the CQM acting on behalf of the SSHO, shall perform the following:

1. Prior to start of work on a task order project conduct a safety meeting to discuss the trade specific Activity Hazard Analysis (AHA) with all Contractor and subcontractor personnel. Ensure that all new personnel on the project site receive this training prior to start of work. Document all personnel that receives the training by use of an attendance roster, to include the printed name, signature of each tradesman and the date training was received.
2. Conduct daily safety and health inspections and maintain a written deficiency tracking log which includes project sites inspected, date of inspection, identified hazards, recommended corrective actions, safety training conducted, estimated and actual dates of training and corrective action. Safety inspection documentation shall be submitted as an attachment to the Contractors' Daily Production Report and posted on the jobsite information board.
3. Attend the contract Preperformance Conference Meeting, all preconstruction task order meetings, partnering meetings, project preparatory phase meetings, and safety tailgate meetings.

4. Failure to actively apply an acceptable Safety Program may result in the dismissal of the Project Manager, On-Site Project Superintendent, SSHO and QCM. Additionally, the Contracting Officer may direct the Contractor to stop work for failure to apply an acceptable Safety Program. The project work stoppage will remain in effect pending approval of a suitable replacement and all deficiencies with the safety program have been corrected to the approval of the Contracting Officer. The Contractor will not be reimbursed for the costs associated with replacing personnel nor with the costs incurred to the Contractor as a direct result of a work stoppage.
5. The SSHO or CQM must conduct daily safety inspections of each jobsite and submit a Daily Safety Evaluation Checklist attached to the Contractor's Daily Production Report. Document all unsafe conditions and corrective action to eliminate the unsafe conditions.

## 1.5 COMPETENT PERSON QUALIFICATION AND RESPONSIBILITIES

1.5.1 A "Competent person" means one who has successfully completed the Federal OSHA 30 Hour General Construction Training Certificate Program and who is capable of identifying existing and predictable hazards in the surroundings or working conditions, which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

1.5.1.1 The Competent Person assigned to trenching and excavation projects must have completed the Federal OSHA 29 CFR 1926 30-Hour Competent Person Training – Excavation course.

1.5.2 The Contractor must have at least one Competent Person on each construction project site at all times while work is being performed. The Competent Person must report to the SSHO daily for all matters pertaining to project and job site safety. The Competent Person may be an employee of the Prime Contractor or an employee of a subcontractor and may have the title of Supervisor as found in SECTION 01 30 00, ADMINISTRATIVE REQUIREMENTS, paragraph 1.4.5 Supervision.

1.5.2.1 Each Competent Person must possess on their person a current OSHA Construction Training wallet card and must present it to the Contracting Officer or to the Contracting Officer's representative upon request.

1.5.2.2 The Competent Person must conduct daily safety inspections of the job site and job site equipment and provide documentation of unsafe conditions and corrective actions taken to eliminate the unsafe conditions to the SSHO.

1.5.2.3 The Competent Person may be assigned, as a collateral duty, to conduct AHA training and other safety training as required.

## 1.6 REPORTS

### 1.6.1 Accident Reports

1.6.1.1 The Contractor shall conduct an accident investigation to establish the root cause(s) of a accident, complete the Navy Contractor Significant Incident Report (CSIR) form and provide the report to the Contracting Officer within 48-hours of the accident for recordable injuries and illnesses, and property damage accidents resulting in damages equal to or greater than \$2,000. The Contracting Officer will provide copies of any additional required or special forms.

1.6.2 Accident Notification: Notify the Contracting Officer immediately, but no later than two hours after an accident, for any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000. Information shall include the Contractor's name; contract title; type of contract; task order number, name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and the Government investigation is completed.

## 1.7 PREPERFORMANCE CONFERENCE AND PRECONSTRUCTION MEETING

1.7.1 The Contractor's SSHO and CQM shall attend the contract Preperformance Conference meeting. The objective of this meeting is to discuss health and safety concerns related to the type of work to be performed as outlined in the technical sections of this contract, to discuss health and safety administration, organizational structure and expectations, review and discuss comments and concerns regarding the APP and SSHP, the necessary requirements and development of AHA's, and other health and safety issues that may be of concern.

1.7.1.1 The Contractor shall submit the Accident Prevention Plan (APP) and Site Safety and Health Plan (SSHP) at this meeting for review and approval by the Contracting Officer.

1.7.2 The Contractor shall conduct a preconstruction safety meetings prior to the start of work on each task order or task order project, and shall conduct weekly tailgate safety meetings thereafter. Submit documentation, to include a date of the safety meeting, roster of attendees and safety topics addressed, attached to the Contractor's Daily Production Report of the following work day.

1.7.2.1 The Contractor and subcontractors shall develop and submit a site specific and task specific Activity Hazard Analysis (AHA) for each task order project to the FSC Engineering Technician/Construction Representative for review and approval. The Contractor shall not mobilize, stage materials or equipment, nor commence work until the AHA has been approved.

## 1.8 ACCIDENT PREVENTION PLAN/SITE SAFETY AND HEALTH PLAN (APP/SSHP)

1.8.1 The policies and requirements addressed in the plans shall be implemented and enforced throughout the duration of this contract. Address all occupational safety and health hazards (traditional construction as well as contaminant-related hazards) associated with cleanup operations within the APP/SSHP. Cover each SSHP element in accordance with the pertinent sections found in the EM 385-1-1 and each APP element in Attachment A of EM 385-1-1. The Contractor is advised that there are overlapping elements in the sections found in the EM 385-1-1 and Attachment A of EM 385-1-1. The SSHP Attachment elements that overlap with the APP elements need not be duplicated in the APP/SSHP provided each safety and health requirement receives adequate attention and is documented in the APP/SSHP. The APP/SSHP is a dynamic document, subject to change as the contract operations/execution change. The APP/SSHP will require modification to address changing and previously unidentified health and safety conditions. It is the Contractor's responsibility to ensure that the APP/SSHP is updated accordingly at no cost to the Government. Submit amendments to the APP/SSHP to the FSC Engineering Technician/Construction Representative as the APP/SSHP is updated.

1.8.2 The Contractor shall develop the Activity Hazard Analysis in accordance with the current edition of the Army Corps of Engineering Manual EM-385-1-1.

## **PART 2 PRODUCTS**

Not Used

## **PART 3 EXECUTION**

### 3.1 CONSTRUCTION AND OTHER WORK

3.1.1 The Contractor shall comply with the USACE EM 385-1-1, NFPA 241, 29 CFR 1910, 29 CFR 1926, SSHP, other Federal, and Great State of California and local regulations. MCB Camp Pendleton Base Orders, and with the approved APP/SSHP and AHA. The most stringent standard or regulation shall prevail.

3.1.2 Hazardous Material Use: No hazardous material may be used in during the performance of work issued on this contract.

3.1.3 Hazardous Material Exclusions: Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/nonionizing radiation (with the exception of radioactive material

and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

3.1.4 Unforeseen Hazardous Material: If material that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Contracting Officer will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Contracting Officer may issue a contract modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

### 3.2 PRE-OUTAGE COORDINATION

3.2.1 Contractors are required to apply for utility outages at least 21 calendar days in advance of the needed outage. At a minimum, the request should include the location of the outage, utilities being affected, duration of outage and sketches of the work area. Once approved, and prior to beginning work, the Contractor shall coordinate a pre-outage meeting with the Contracting Officer to review the scope of work.

### 3.3 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

3.3.1 Where safety regulations dictate, the Contractor shall establish a Fall Protection and Prevention Program for the protection of all employees exposed to fall hazards. The program shall include the company's fall protection policy, identify personnel responsibilities, education and training requirements for personnel, identification of fall hazards, fall prevention and control measures, inspection schedules and methods, staging and storage of material and equipment, care and maintenance of fall protection equipment, and rescue and evacuation procedures in accordance with 29 CFR 1926 Subpart M and ANSI/ASSE Z359.0, ANSI/ASSE Z359.1, ANSI/ASSE Z359.2, ANSI/ASSE Z359.3, AND ANSI/ASSE Z359.4 and ANSI A10.32.

### 4 EQUIPMENT

#### 3.4.1 Material Handling Equipment

3.4.1.1 Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees, unless specifically delineated in the manufacturer's printed operating instructions.

3.4.1.2 The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.

3.4.1.3 Operators of forklifts or power industrial trucks shall be licensed in accordance with 29 CFR 1910.178(l).

#### 3.5.2 Utility Locations

3.5.2.1 Locating: Prior to digging, the appropriate digging permit must be obtained. All underground utilities in the work area must be positively identified by a private utility locating service in addition to any station locating service and coordinated with the station utility department. Any markings made during the utility investigation must be maintained by the Contractor throughout the period of construction on a task order or project.

3.5.2.2 Utility Location Verification: The Contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within 610 mm [2 feet] of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility expose the utility by hand digging every 30.5 m (100 feet) if parallel within 1.5 m (5 feet) of the excavation.

### 3.6 ELECTRICAL

3.6.1 Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Attachment of temporary grounds shall be in accordance with ASTM F855 and IEEE 1048. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA.

### 3.7 WORK IN CONFINED SPACES

3.7.1 In addition to the requirements of Section 06.I of USACE EM 385-1-1, OSHA 29 CFR 1910.146 and OSHA 29 CFR 1926.21(b)(6) the Contractor shall comply with the following.

3.7.1.1 Entry Procedures: Prohibit entry into a confined space by personnel for any purpose, including hot work, until a gas free engineer has conducted appropriate tests to ensure the confined or enclosed space is safe for entry, all potential hazards are controlled or eliminated and confined space entry documentation is completed. (See Section 06.I.06 of USACE EM 385-1-1 for entry procedures.) All hazards pertaining to the space shall be reviewed with each employee during review of the Confined Space Entry Plan.

3.7.1.2 Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

### 3.8 INSPECTIONS

3.8.1 The SSHO or assigned QCM shall perform daily and ongoing safety inspections. All safety discrepancies and near mishaps shall be documented on the Safety Inspection Report. The Safety Inspection Report shall be submitted along with the Contractor's Daily Production Report.

3.2 Tailgate Safety Meetings: The SSHO or QCM shall conduct Tailgate Safety Meetings at the beginning of each project and at the beginning of each week or when work resumes, and before the work shift starts working.

-- End of Section --

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## SECTION 01 35 40.00 20

### ENVIRONMENTAL MANAGEMENT

#### PART 1 GENERAL

##### 1.1 REFERENCES

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

#### AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z400.1 (2004) Hazardous Industrial Chemicals - Material Safety Data Sheets - Preparation

#### ASTM INTERNATIONAL (ASTM)

ASTM D 4840 (1999; R 2004) Sampling Chain-Of-Custody Procedures

ASTM D 5663 (1997; R 2003) Validating Recycled Content in Packaging Paper and Paperboard

ASTM E 1991 (2005) Environmental Life Cycle Assessment of Building Materials/Products

ASTM E 2114 (2008) Standard Terminology for Sustainability Relative to the Performance of Buildings

#### INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

ISO 14040 (2006) Environmental Management - Life Cycle Assessment - Principles and Framework

#### NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

NIST BEES 4.0 (2007) Building for Environmental and Economic Sustainability Technical Manual and User's Guide

#### U.S. DEPARTMENT OF AGRICULTURE (USDA)

Biomass R&D Act (2000) Biomass Research and Development Act

U.S. Farm Bill (2002) U.S. Farm Bill of May 2002

#### U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

NPDES (1972; R 2005) National Pollutant Discharge Elimination System

#### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR

Protection of Environment

40 CFR 261

Identification and Listing of Hazardous Waste

## 1.2 DEFINITIONS

1.2.1 Definitions pertaining to sustainable development are defined in ASTM E 2114, Standard Terminology for Sustainability Relative to the Performance of Buildings and as below:

1.2.1.1 Pollution and environmental damage" is caused by the presence of chemical, physical, or biological elements or agents. Human health or welfare is adversely affected; ecological balances are unfavorably altered, and the utility of the environment for aesthetic, cultural, or historical purposes degrades.

## 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

### SD-01 Preconstruction Submittals

- Environmental Protection Plan, contract specific; GA, RO, PO
- Environmental Manager, contract specific; GA, R, P

## 1.4 CONTRACTOR'S ENVIRONMENTAL MANAGER

1.4.1 Designate an Environmental Manager responsible for overseeing the environmental goals for the contract and implementing procedures for environmental protection. The QCM may act as the Environmental Manager.

1.4.1.1 The Environmental Manager shall be responsible for the following duties:

- a. Ensuring compliance with applicable Federal, Great State of California, MCB Camp Pendleton, San Diego County, and local environmental regulations, including maintaining required documentation.
- b. Implementation and management of the Waste Management Plan.
- c. Implementation and management Recycle Plan.
- d. Environmental training for Contractor and subcontractor personnel in accordance with their position requirements.
- e. Monitoring and documentation of environmental procedures on project sites, storage and staging areas and the assigned lot located in the 26 Area Laydown Lot, if applicable.

1.4.2 Qualifications: Minimum 3 years construction experience on contracts of similar size and scope, familiarity with Environmental Management Systems (EMSs), and familiarity with environmental regulations applicable to construction operations as specified in this contract.

## 1.5 ENVIRONMENTAL REGULATORY REQUIREMENTS

1.5.1 The Contractor's Environmental Manager shall be responsible for knowing Federal, Great State of California, San Diego County, MCB Camp Pendleton, and local regulatory requirements pertaining to legal disposal of all construction

and demolition waste materials. The Environmental Manager shall be certified as an Asbestos Contractor Supervisor and as a Lead Project Monitor. The Environmental Manager must ensure that all work complies with all applicable regulations and shall maintain records of permits, licenses, certificates, and other environmental regulatory requirement correspondences.

1.5.2 If the Contractor is allowed to use one of MCB Camp Pendleton's landfills, the Environmental Manager shall track, record and submit monthly documentation for each load disposed of at the landfill. The documentation shall indicate the tonnage disposed of for each trip, the date, and type of material. The Monthly Report is due at the end of each month and shall be submitted to the FSC Inspection Branch Engineering Technician/Construction Representative.

1.5.3 All ACM abatements shall be in accordance with specifications found in SECTION 02 82 16.00 20 "ENGINEERING CONTROL OF ASBESTOS CONTAINING MATERIALS" and as specified in other sections found in this contract.

1.5.4 All LBP abatements shall be in accordance with SECTION 02 82 33.13 20 "REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD" and as specified in other sections found in this contract.

## 1.6 ENVIRONMENTAL REQUIREMENTS FOR PRODUCTS

1.6.1 Material Safety Data Sheets (MSDS): Submit a MSDS for each product that will be used in the performance work on this contract. The MSDS shall have been prepared no earlier than June 1998. Include information for MSDS in accordance with ANSI Z400.1 and as follows:

- a. Include data used to determine the hazards cited in Section 3. Identify acute data, carcinogenicity, reproductive effects, and target organ effects.
- b. Include data regarding environmental impacts during raw materials acquisition, manufacture, and use. Include data regarding environmental impacts in the event of an accidental release.
- c. Include data regarding the proper disposal of the chemical. Include information regarding recycling and reuse. Indicate whether or not the product is considered to be "hazardous waste" according to 40 CFR 261.
- d. Identify hazard class for shipping.
- e. Identify Federal, Great State of California, and local regulations applicable to the material.
- f. Include additional information relative to recycled content, biobased content, and other information regarding environmental and health impacts.

## 1.7 ENVIRONMENTAL PROTECTION PLAN

1.7.1 Prepare and submit a Environmental Protection Plan within 15-calendar days after award of this contract. At a minimum, address the following elements in accordance with this section:

- a. Identification and resume of the Environmental Manager.
- b. Summary of the Contractor's understanding of environmental protection and their intent to administrate and manage the Environmental Protection Plan.
- c. Summary of training program.
- d. Monitoring procedures for ACM and LBP abatement and the implementation of quality control procedures.

## 1.8 ENVIRONMENTAL TRAINING

1.8.1 The Contractor's Environmental Manager shall ensure that environmental training is conducted and completed for all workers performing work on this.

1.8.2 Training Program: Develop a training program that includes the following topics:

- a. Overview of environmental issues related to flooring removal and installation.
- b. Methodology to identify suspected ACM and LBP, the procedures to take to avoid disturbance and instructions for notifying the Contractor key personnel and the Contracting Officer.
- c. How to comply with applicable Federal, Great State of California, San Diego County and MCB Camp Pendleton Environmental Security Office environmental regulations.

1.8.3 Evaluation: At the conclusion of each training session, assess and document each participant's understanding of the environmental training information by use of an oral performance-based test. Submit supporting documentation, to include a roster of personnel that attended and the date of attendance. The documentation shall be submitted the following day of work as part of the Contractor's Daily Production Report.

## **PART 2 PRODUCTS**

### **2.1 ENVIRONMENTALLY PREFERABLE PRODUCTS**

2.1.1 Consider the impact to the environment when selecting for use raw materials, production, manufacturing, packaging, distribution, reuse, operation, maintenance, and disposal of products. Provide products and materials with the least impact on the environment.

### **2.2 PROHIBITED MATERIALS**

2.2.1 The use of the following materials is prohibited:

- a. Products containing asbestos.
- b. Products containing urea formaldehyde.
- c. Products containing polychlorinated biphenyls
- d. Products containing chlorinated fluorocarbons.
- e. Solder or flux containing more than 0.2 percent lead and domestic water pipe or pipe fittings containing more than 8 percent lead.
- f. Paint containing more than 0.06 percent lead.

### **2.3 PACKAGING**

2.3.1 Where Contractor has the option to provide one of the listed products or equal, preference shall be given to products with minimal packaging and easily recyclable packaging, and to manufacturers with policies that take back product packaging.

2.3.2 Industrial Paperboard: Minimum 45-percent post-consumer recycled content in accordance with ASTM D 5663.

2.3.3 Carrier Board: Minimum 10-percent recycled content with a minimum of 10-percent post-consumer recycled content in accordance with ASTM D 5663.

2.3.4 Brown Papers: Minimum 5-percent recycled content with a minimum of 5-percent post-consumer recycled content in accordance with ASTM D 5663.

2.5 Substitutions: Notify the Contracting Officer when aware of materials, equipment, or products that meet the aesthetic and programmatic intent of contract specifications, but which are more environmentally responsible than materials, equipment, or products specified or indicated in the contract technical section. Submit the following for initial review by the Contracting Officer:

- a. Product data including manufacturer's name, address, and phone number.
- b. Description of environmental advantages of proposed substitution over specified product.

### **PART 3 EXECUTION**

#### **3.1 PROTECTION OF NATURAL RESOURCES**

3.1.1 All work shall be in accordance with the issued Category Exclusion. Comply with all applicable regulations and contract specifications. Preserve the natural resources within the boundaries of the Activities and directly outside the boundaries of the Activities in the performance of work under this contract. Restore the impacted environmental areas to their existing condition or restore to an equivalent or improved condition as approved by the Contracting Officer. Document all impacts to the environment during construction of the Contractor's Daily Production Report.

3.1.2 Air Resources: Comply with Indoor Air Quality (IAQ) Management Plan and as follows:

- a. Prevent creation of dust, air pollution, and odors.
- b. Sequence construction to avoid unnecessary disturbance to site.
- c. Store volatile liquids, including fuels and solvents, in closed containment containers. Do not store with materials that have a high capacity to absorb VOC emissions or in occupied spaces.
- d. Properly maintain equipment to reduce gaseous pollutant emissions.

-- End of Section --

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## SECTION 01 42 00

### SOURCES FOR REFERENCE PUBLICATIONS

05/09

#### PART 1 GENERAL

##### 1.1 REFERENCES

1.1 Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

##### 1.2 ORDERING INFORMATION

1.2.1 The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

###### ACOUSTICAL SOCIETY OF AMERICA (ASA)

2 Huntington Quadrangle, Suite 1N01

Melville, NY 11747-4502

Ph: 516-576-2360

Fax: 516-576-2377

E-mail: [asa@aip.org](mailto:asa@aip.org)

Internet: <http://asa.aip.org>

###### ACI INTERNATIONAL (ACI)

38800 Country Club Drive

Farmington Hills, MI 48331

Ph: 248-848-3700

Fax: 248-848-3701

E-mail: [bkstore@concrete.org](mailto:bkstore@concrete.org)

Internet: <http://www.concrete.org>

###### AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE (AHRI)

2111 Wilson blvd, Suite 500

Arlington, VA 22201

Ph: 703-524-8800

Fax: 703-528-3816

E-mail: [ahri@ahrinet.org](mailto:ahri@ahrinet.org)

Internet: <http://www.ahrinet.org>

###### AIR CONDITIONING CONTRACTORS OF AMERICA (ACCA)

2800 Shirlington Road, Suite 300

Arlington, VA 22206

Ph: 703-575-4477

Fax: 703-575-4449

E-mail: [info@acca.org](mailto:info@acca.org)

Internet: <http://www.acca.org>

**AIR DIFFUSION COUNCIL (ADC)**

104 So. Michigan Ave., No. 1500  
Chicago, IL 60603  
Ph: 312-201-0101  
Fax: 312-201-0214

**AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL (AMCA)**

30 West University Drive  
Arlington Heights, IL 60004-1893  
Ph: 847-394-0150  
Fax: 847-253-0088  
E-mail: [amca@amca.org](mailto:amca@amca.org)  
Internet: <http://www.amca.org>

**ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS (ATIS)**

1200 G Street, NW, Suite 500  
Washington, D.C. 20005  
Ph: 202-628-6380  
Fax: 202-393-5453  
Internet: <http://www.atis.org>

**ALUMINUM ASSOCIATION (AA)**

National Headquarters  
1525 Wilson Boulevard, Suite 600  
Arlington, VA 22209  
Ph: 703-358-2960  
Fax: 703-358-2961  
Internet: <http://www.aluminum.org>

**AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)**

1827 Walden Office Square  
Suite 550  
Schaumburg, IL 60173-4268  
Ph: 847-303-5664  
Fax: 847-303-5774  
E-mail: [webmaster@aamanet.org](mailto:webmaster@aamanet.org)  
Internet: <http://www.aamanet.org>

**AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)**

444 North Capital Street, NW, Suite 249  
Washington, DC 20001  
Ph: 202-624-5800  
Fax: 202-624-5806  
E-Mail: [info@ashto.org](mailto:info@ashto.org)  
Internet: <http://www.aashto.org>

**AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)**

1 Davis Drive  
P.O. Box 12215  
Research Triangle Park, NC 27709-2215  
Ph: 919-549-8141  
Fax: 919-549-8933

E-mail: [quantem@aatcc.org](mailto:quantem@aatcc.org)  
Technical Questions: [hammona@aatc.org](mailto:hammona@aatc.org)  
Internet: <http://www.aatcc.org>

AMERICAN BEARING MANUFACTURERS ASSOCIATION (ABMA)  
2025 M Street, NW, Suite 800  
Washington, DC 20036  
Ph: 202-367-1155  
Fax: 202-367-2155  
E-mail: [info.abma@smithbucklin.com](mailto:info.abma@smithbucklin.com)  
Internet: <http://www.abma-dc.org>

AMERICAN BOILER MANUFACTURERS ASSOCIATION (ABMA)  
8221 Old Courthouse Road Suite 207  
Vienna, VA 22182  
Ph: 703-356-7172  
Fax: 703-356-4543  
Internet: <http://www.abma.com>

AMERICAN BUREAU OF SHIPPING (ABS)  
Internet: <http://www.eagle.org>

AMERICAN CONCRETE PIPE ASSOCIATION (ACPA)  
222 West Las Colinas Boulevard, Suite 641  
Irving, TX 75039-5423  
Ph: 972-506-7216  
Fax: 972-506-7682  
E-mail: [info@concrete-pipe.org](mailto:info@concrete-pipe.org)  
Internet: <http://www.concrete-pipe.org>

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)  
1330 Kemper Meadow Drive  
Cincinnati, OH 45240  
Ph: 513-742-2020  
Fax: 513-742-3355  
E-mail: [mail@acgih.org](mailto:mail@acgih.org)  
Internet: <http://www.acgih.org>

AMERICAN FOREST & PAPER ASSOCIATION (AF&PA)  
American Wood Council  
ATTN: Publications Department  
1111 Nineteenth Street NW, Suite 800  
Washington, DC 20036  
Ph: 800-890-7732 or 202-463-2766  
Fax: 202-463-2791  
Internet: <http://www.awc.org/>

AMERICAN GAS ASSOCIATION (AGA)  
400 North Capitol Street N.W.  
Suite 450  
Washington, D.C. 20001  
Ph: 202-824-7000  
Fax: 202-824-7115  
E-mail: [webmaster@aga.org](mailto:webmaster@aga.org)

Internet: <http://www.aga.org>

**AMERICAN GEAR MANUFACTURERS ASSOCIATION (AGMA)**

500 Montgomery Street, Suite 350

Alexandria, VA 22314-1560

Ph: 703-684-0211

Fax: 703-684-0242

E-mail: [webmaster@agma.org](mailto:webmaster@agma.org)

Internet: <http://www.agma.org>

**AMERICAN HARDBOARD ASSOCIATION (AHA)**

c/o Composite Panel Association

18922 Premiere Court

Gaithersburg, MD 20879-1574

Ph: 301-670-0604

Fax: 301-840-1252

Internet: <http://www.pbmdf.org>

**AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA)**

2700 Prosperity Ave., Suite 250

Fairfax, VA 22031

Tel: 703-849-8888

Fax: 703-207-3561

E-mail: [infonet@aiha.org](mailto:infonet@aiha.org)

Internet <http://www.aiha.org>

**AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)**

One East Wacker Drive

Chicago, IL 60601-1802

Ph: 312-670-2400

Fax: 312-670-5403

Publications: 800-644-2400

E-mail: [pubs@aisc.org](mailto:pubs@aisc.org)

Internet: <http://www.aisc.org>

**AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)**

7012 South Revere Parkway, Suite 140

Englewood, CO 80112

Ph: 303-792-9559

Fax: 303-792-0669

E-mail: [info@aitc-glulam.org](mailto:info@aitc-glulam.org)

Internet: <http://www.aitc-glulam.org>

**AMERICAN IRON AND STEEL INSTITUTE (AISI)**

1140 Connecticut Avenue, NW, Suite 705

Washington, DC 20036

Ph: 202-452-7100

Fax: 202-463-6573

Internet: <http://www.steel.org>

**AMERICAN LADDER INSTITUTE (ALI/LADDER)**

410 North Michigan Avenue

Chicago, IL 60611

Tel: 312-644-6610

Fax: 312-527-6705  
E-mail: [rpietrzak@smithbucklin.com](mailto:rpietrzak@smithbucklin.com)  
Internet: <http://www.americanladderinstitute.org>

AMERICAN LUMBER STANDARDS COMMITTEE (ALSC)  
P.O. Box 210  
Germantown, MD 20875-0210  
Ph: 301-972-1700  
Fax: 301-540-8004  
E-mail: [alsc@alsc.org](mailto:alsc@alsc.org)  
Internet: <http://www.alsc.org>

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)  
1819 L Street, NW, 6th Floor  
Washington, DC 20036  
Ph: 202-293-8020  
Fax: 202-293-9287  
E-mail: [info@ansi.org](mailto:info@ansi.org)  
Internet: <http://www.ansi.org/>

AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA)  
1000 Vermont Avenue, NW, Suite 300  
Washington, DC 20005-4914  
Ph: 202-789-2900  
Fax: 202-789-1893  
Internet: <http://www.anla.org>

AMERICAN PETROLEUM INSTITUTE (API)  
1220 L Street, NW  
Washington, DC 20005-4070  
Ph: 202-682-8000  
Fax: 202-682-8223  
Internet: <http://www.api.org>  
AMERICAN PUBLIC HEALTH ASSOCIATION (APHA)  
800 I Street, NW  
Washington, DC 20001  
Ph: 202-777-2742  
Fax: 202-777-2534  
E-mail: [comments@apha.org](mailto:comments@apha.org)  
Internet: <http://www.apha.org>

AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (AREMA)  
10003 Derekwood Lane, Suite 210  
Lanham, MD 20706  
Ph: 301-459-3200  
Fax: 301-459-8077  
Internet: <http://www.arena.org>

AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)  
1711 Arlingate Lane  
P.O. Box 28518  
Columbus, OH 43228-0518  
Ph: 800-222-2768; 614-274-6003  
Fax: 614-274-6899

E-mail: [webmaster@asnt.org](mailto:webmaster@asnt.org)  
Internet: <http://www.asnt.org>

**AMERICAN SOCIETY FOR QUALITY (ASQ)**

600 North Plankinton Avenue  
Milwaukee, WI 53203

-or-

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Ph: 202-501-1021  
Internet: [www.GSA.gov](http://www.GSA.gov)

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Department of Defense Single Stock Point (DODSSP)  
Document Automation and Production Service (DAPS)  
Building 4/D  
700 Robbins Avenue  
Philadelphia, PA 19111-5094  
Ph: 215-697-6396 - for account/password issues  
Internet: <http://assist.daps.dla.mil/online/start/>; account registration required

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)  
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College Park, MD 20740-6001  
Ph: 866-272-6272  
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Fax: 202-512-2104  
E-mail: [contactcenter@gpo.gov](mailto:contactcenter@gpo.gov)  
Internet: <http://www.gpoaccess.gov>

U.S. NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)  
1322 Patterson Ave. SE, Suite 1000  
Washington Navy Yard, DC 20374  
Ph: 757-322-4200  
Fax: 757-322-4416  
Internet: <http://www.navfac.navy.mil>

U.S. NAVAL FACILITIES ENGINEERING SERVICE CENTER (NFESC)  
1100 23rd Avenue  
Port Hueneme, CA 93043-4370  
Ph: 805-982-4980  
Internet: <http://www.nfesc.navy.mil>

WASHINGTON STATE ADMINISTRATIVE CODE (WAC)  
Code Reviser  
P.O. Box 4055  
Olympia, WA 98504-0551  
Ph: 360-782-6777  
Fax: 360-786-1529  
E-mail: Via internet address and prompt at "Title 1: Code Reviser"  
Internet: <http://apps.leg.wa.gov/wac/>

WATER ENVIRONMENT FEDERATION (WEF)  
601 Wythe Street  
Alexandria, VA 22314-1994  
Ph: 703-684-2452 or 1-800-666-0206  
Fax: 703-684-2492  
E-mail: [pubs@wef.org](mailto:pubs@wef.org)  
Internet: <http://www.wef.org>

WATER QUALITY ASSOCIATION (WQA)  
4151 Naperville Road  
Lisle, IL 60532  
Ph: 630-505-0160  
Fax: 630-505-9637  
E-mail: [info@mail.wqa.org](mailto:info@mail.wqa.org)  
Internet: <http://www.wqa.org>

WEST COAST LUMBER INSPECTION BUREAU (WCLIB)  
P.O. Box 23145  
Tigard, OR 97281  
Ph: 503-639-0651

Fax: 503-684-8928  
E-mail: [info@wclib.org](mailto:info@wclib.org)  
Internet: <http://www.wclib.org>

WESTERN WOOD PRESERVERS INSTITUTE (WWPI)  
7017 N.E. Highway 99 Suite 108  
Vancouver, WA 98665  
Ph: 360-693-9958  
Fax: 360-693-9967  
E-mail: [info@wwpinstitute.org](mailto:info@wwpinstitute.org)  
Internet: <http://www.wwpinstitute.org>

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)  
Yeon Building  
522 SW 5th Avenue  
Suite 500  
Portland, OR 97204-2122  
Ph: 503-224-3930  
Fax: 503-224-3934  
E-mail: [info@wwpa.org](mailto:info@wwpa.org)  
Internet: <http://www.wwpa.org>

WINDOW AND DOOR MANUFACTURERS ASSOCIATION (WDMA)  
1400 East Touhy Avenue, Suite 470  
Des Plaines, IL 60018  
Ph: 847-299-5200 or 800-223-2301  
Fax: 847-299-1286  
E-mail: [admin@wdma.com](mailto:admin@wdma.com)  
Internet: <http://www.wdma.com>

WIRE ROPE TECHNICAL BOARD (WRTB)  
801 North Fairfax Street, Suite 211  
Alexandria, VA 22314  
Ph: 703-299-8550  
Fax: 703-299-9253  
E-mail: [wrtb@usa.net](mailto:wrtb@usa.net)  
Internet: [www.domesticwirerope.org/wrtb](http://www.domesticwirerope.org/wrtb)

WOOD MOULDING AND MILLWORK PRODUCERS ASSOCIATION (WMMPA)  
507 First Street  
Woodland, CA 95695  
Ph: 530-661-9591  
Fax: 530-661-9586  
E-mail: [info@wmmpa.com](mailto:info@wmmpa.com)  
Internet: <http://www.wmmpa.com>

WOOLMARK BUSINESS INTELLIGENCE (WBI)  
The Woolmark Company  
1230 Avenue of the Americas, 7th Fl.  
New York, NY 10020  
Ph: 646-756-2535  
Fax: 646 756 2538  
Internet: [www.woolmark.org](http://www.woolmark.org)

## **PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

-- End of Section --

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## SECTION 01 45 02.10

### QUALITY CONTROL FOR MINOR CONSTRUCTION 02/10

#### PART 1 GENERAL

##### 1.1 REFERENCES

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

#### U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1

(2008) Safety and Health Requirements Manual

##### 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Preconstruction Submittals

- Construction Quality Control Management System: Submit a Construction Quality Control Plan that addresses the administration, management, and quality control procedures and measurements as they apply to this contract; GA, RO, PO
- Qualifications of the Construction Quality Control Manager (QCM). Submit a resume of the assigned CQCM's qualifications and experience for contracts of similar size and scope over the past 3-years.; GA, RO, PO
- Contractor's Daily Production Report: Submit by 0800 of the following day for each definable feature of work, for each awarded task order; GA, RO, PO
- Quality Control Checklist: Submit by 0800 of the following day for each definable feature of work, for each awarded task order; GA, RO, PO

##### 1.3 INFORMATION FROM THE CONTRACTING OFFICER

1.3.1 Prior to commencing work on this contract, the Contractor will be provided with a hard copy or an electronic copy of the Contractor's Daily Production Report. The report consists of the Contractor Daily Production Report, Contractor Production Report (Continuation Sheet), Contractor Quality Control (CQC) Report, CQC Report (Continuation Sheet), Preparatory Phase Checklist, Initial Phase Checklist, Rework Items List, and Testing Plan and Log.

1.3.2 The QCM shall submit a completed Contractor's Daily Production Report by 8:00 AM specific to the previous day of work and specific to each task order. The Contractor's Daily Production Report may be submitted electronically.

##### 1.4 QC PROGRAM REQUIREMENTS

1.4.1 Establish and maintain a CQC program as described in this section. The CQC program consists of a QCM, and administration and implementation of the approved CQC Plan, implementation of the three phases of control, submittal review and approval, testing, certifications, reports and documentation necessary to ensure the quality of materials, equipment, workmanship, fabrication, and construction comply with the General and Technical sections found in this contract. The QC program shall cover on-site and off-site work and shall be keyed to the work sequence. No work or testing may be performed unless the QCM is on the work site. The QCM must report to the Project Superintendent and the Project Manager. The QCM, Project Superintendent and Project Manager must work together effectively to provide a well managed contract and to provide a quality product. Although the QCM is the primary individual responsible for quality control, all individuals will be held responsible for the quality of work on the job.

1.4.2 Preliminary Work Authorized Prior to Acceptance: Mobilization, staging and storing of material and equipment, and work may not begin until the contract CQC Plan has been approved and accepted by the Contracting Officer.

1.4.3 Acceptance: The Contracting Officer may require changes in the CQC Plan and operations as necessary, including the removal of personnel, to ensure quality a quality product is being produced. The Contracting Officer reserves the right to interview any member of the QC organization at any time in order to verify the submitted qualifications.

1.4.4 Notification of Changes: Notify the Contracting Officer, in writing, of any proposed change to the QC Plan, including changes in the QC organization personnel, within 7-calendar days prior to a proposed change. Proposed changes shall be subject to review and approval by the Contracting Officer.

## 1.5 QC ORGANIZATION

### 1.5.1 QC Manager

#### 1.5.1.1 Duties

- a. The QCM shall implement and manage the approved QC Plan. The QCM is required to attend the Preperformance Conference Meeting and all task order preconstruction meetings, conduct QC meetings with the PM and PS, perform the three phases of control, perform submittal review and approval, ensure testing is performed and provide QC certifications and documentation required by this contract. The QCM is responsible for managing and coordinating the three phases of control and documentation for subcontractor work. The QCM may rove from one in-progress project job site to another within MCB Camp Pendleton, CA and Naval Weapons Station Seal Beach, Fallbrook Annex.
- b. The QCM may act as the SSHO and the Environmental Manager. The QCM may not be the same person as the PM and PS not shall the QCM act as the PM and PS. The QCM shall meet the following requirement to act as the SSHO and to perform safety inspections and enforce safety regulations and to act as a Environmental Manager:
  - 1) Acting as the SSHO: Level 3: A minimum of three years in the capacity as a safety inspector on similar types of contacts and shall posses a current OSHA 10 and 30-Hour Construction Training certificate. The certification must be maintained current. Additionally the SSHO shall have attended and completed 24-hours of formal safety training each year for the past three years.
  - 2) Acting as the Environmental Manager: Minimum three year's construction experience on contracts of similar size and scope; minimum 1 years experience with environmental procedures; familiarity with Environmental Management Systems (EMSs), and familiarity with environmental regulations applicable to construction operations.
- c. The QCM shall not act as a foreman, crew leader or leadman, nor shall the QCM be a worker on any task order projects during the duration of this contract.

1.5.1.2 Qualifications: The QCM shall have a minimum of three years combined experience as a superintendent, inspector, QCM, project manager, or construction manager on similar size and type of construction contracts which include the trades that will be performing work on this contract. The individual must be familiar with the requirements of the Army Corps of Engineers Manual EM 385-1-1 and have experience in the areas of hazard identification and safety compliance.

- a. Construction Quality Management Training: In addition to the above experience and education requirements, the QC Manager shall have completed the course Construction Quality Management for Contractors within 6-months after award of this contract and shall maintain a current certificate.

1.5.2 Alternate QC Manager Duties and Qualifications: Designate an alternate for the QCM to serve in the event of the designated QCM's absence. The period of absence may not exceed four weeks at one time, and not more than 30-calendar during a calendar year. The qualification requirements for the Alternate QC Manager shall be the same as for the QCM.

1.5.3 Newly appointed QCM's shall meet the requirements listed above and require qualification submittals. Submit the qualification submittals within 7-calendar days from appointment to the Contracting Officer for review and approval.

## 1.6 CQC PLAN

1.6.1 Requirements: Submit for review and approval of the Contracting Officer, a CQC Plan in a three-ring binder assembled in tabular format that includes a table of contents listing the following:

- I. QC ORGANIZATION: A chart showing the QC organizational structure and its relationship to the production side of the organization.
- II. NAMES AND QUALIFICATIONS: In resume format, for each person in the QC organization. Include the certification for completing Construction Quality Management Training.
- III. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONAL: Of each person in the QC organization.
- IV. OUTSIDE ORGANIZATIONS: A listing of outside organizations such as architectural and consulting engineering firms that will be employed by the Contractor and a description of the services these firms will provide.
- V. APPOINTMENT LETTERS: Letters signed by an officer of the firm appointing the QCM Alternate QCM and stating that they are responsible for managing and implementing the QC program as specified herein. Include in this letter the QCM's authority to direct the removal and replacement of non-conforming work.
- VI. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving and managing submittals. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval.
- VII. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraphs "Accredited Laboratories" or "Testing Laboratory Requirements."
- VIII. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test.
- IX. PROCEDURES TO COMPLETE REWORK ITEMS: Procedures to identify, record, track and complete rework items.

X. DOCUMENTATION PROCEDURES: Use Government formats.

XI. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task, which is separate and distinct from other tasks, has the same control requirements and work crews. The list shall be cross-referenced to the Contractor's Construction Schedule and the specification sections. A Progress Chart the lists definable features of work and includes, but not be limited to, all items of work on the schedule.

XII. PROCEDURES FOR PERFORMING THREE PHASES OF CONTROL: For each DFOW provide Preparatory and Initial Phase Checklists. Each list shall include a breakdown of quality checks that will be used when performing the quality control functions, inspections, and tests required by the contract documents. The preparatory and initial phases shall be conducted with a view towards obtaining quality construction by planning ahead and identifying potential problems.

XIII. PERSONNEL MATRIX: Not Applicable.

XIV. PROCEDURES FOR COMPLETION INSPECTION: See the paragraph entitled "COMPLETION INSPECTIONS".

XV. TRAINING PROCEDURES AND TRAINING LOG: Not Applicable.

## 1.7 COORDINATION AND PREPERFORMANCE CONFERENCE MEETING AND TASK ORDER PRECONSTRUCTION MEETINGS

1.7.1 During the Preperformance Conference Meeting and task order preconstruction meetings, and prior to the start of construction, discuss the CQC Program explain the process of how quality assessment and quality control will be performed on awarded task order projects as required by this contract. The purpose of the meetings is to develop a mutual understanding of the QC administration, management, implementation and documentation for on-site and off-site work, and the coordination of the Contractor's CQC personnel. At the meeting, the Contractor will be required to explain how the three phases of control will be implemented for each Statement of Work (SOW). The QCM, PM, PS, and SSHO shall attend these meetings. Minutes of the meeting shall be prepared by the QCM, signed by the Contractor and the Contracting Officer, and distributed to all in attendance within 5-calendar days after the meeting has been conducted. The Contractor Officer reserves the right to dispute and clarify areas of disagreement. The QCM shall revise the minutes once the two parties are in agreement and distribute the minutes within 5-calendar days of reaching an agreement.

## 1.8 QC MEETINGS

1.8.1 After the start of construction on an awarded task order, the QCM shall conduct QC meetings once every week at the work site with the Project Superintendent and the foreman/crew leader/leadman in attendance. The QCM shall prepare the minutes of the meeting and submit a copy, as part of the Contractor's Daily Production Report, to the Contracting Officer within two calendar days after the meeting has been conducted. At a minimum the following shall be accomplished at each meeting:

- a. Review the minutes of the previous meeting;
- b. Review the schedule and the status of work and rework;
- c. Review the status of materials being used to the approved submittals;
- d. Review the work to be accomplished in the next two weeks and documentation required;
- e. Resolve QC and production problems (RFIs, etc.);
- f. Address items that may require revising the CQC Plan; and

- g. Review Accident Prevention Plan (APP) and Activity Hazard Analysis (AHA).

## 1.9 THREE PHASES OF CONTROL

1.9.1 Preparatory Phase: Notify the Contracting Officer at least two working days in advance of each preparatory phase. Conduct the preparatory phase with the PS and the foreman/crew leader/leadman responsible for the definable feature of work. Document the results of the preparatory phase actions in the Contractor's Daily Production Report and in the QC checklist. Perform the following prior to beginning work on each definable feature of work:

- a. Review each paragraph of the applicable technical sections.
- b. Review the contract drawings.
- c. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required.
- d. Review the testing plan and ensure that provisions have been made to provide the required QC testing.
- e. Examine the work area to ensure that the required preliminary work has been completed.
- f. Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data.
- g. Review the APP and AHA to ensure that applicable safety requirements are met, and that required Material Safety Data Sheets (MSDS) are submitted.
- h. Discuss the specific controls used and the construction methods and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each task order statement of work.

1.9.2 Initial Phase: Notify the Contracting Officer at least two work days in advance of each initial phase. When construction crews are ready to start work on a task order, conduct the Initial Phase with the foreman/crew leader/leadman responsible for defined work. Observe the initial segment of the work to ensure that it complies with the contract requirements. Document the results of the Initial Phase in the Contractor's Daily Production Report and in the QC checklist. Perform the following for each definable feature of work:

- a. Establish the quality of workmanship required.
- b. Resolve conflicts.
- c. Ensure that testing is performed by the approved laboratory.
- d. Check work procedures for compliance with the APP and the AHA to ensure that applicable safety requirements are met.

1.9.3 Follow-Up Phase: Perform the following for on-going work daily or more frequently as necessary until the completion of each task order project and provide documentation in the Contractor's Daily Production Report and in the QC checklist. Perform the following for each definable feature of work:

- a. Ensure the work is in compliance with contract requirements;
- b. Maintain the quality of workmanship required;
- c. Ensure that testing is performed by the approved laboratory;

- d. Ensure that rework items are being corrected; and
- e. Assure manufacturers representatives have performed necessary inspections, if required.

1.9.4 Additional Preparatory and Initial Phases: Additional preparatory and initial phases shall be conducted on the same task order project if the quality of on-going work is unacceptable, if there are changes in the QC organization, if there are changes in the PS or work crew, if work on a task order is resumed after a substantial period of inactivity, or if other problems develop.

1.9.5 Notification of Three Phases of Control for Off-Site Work: Notify the Contracting Officer at least two weeks prior to the start of the preparatory and initial phases.

## 1.10 SUBMITTAL REVIEW AND APPROVAL

1.10.1 Procedures for submission, review, and approval of submittals are described Section 01 33 00 "Submittal Procedures."

## 1.11 TESTING

1.11.1 Perform sampling and testing as required in the this section and the technical sections found in this contract.

1.11.2 Accreditation Requirements: Construction materials testing laboratories must be accredited by a laboratory accreditation authority. The Contractor shall submit a copy of the Certificate of Accreditation and Scope of Accreditation to the Contracting Officer within 7-calendar days before work may begin for review and approval. Once approved, the Contractor does not need to re-submit in the future, e.g. if the Contractor plans to use the same accredited laboratory. The laboratory's scope of accreditation must include the appropriate ASTM standards (i.e.; E 329, C 1077, D 3666, D 3740, A 880, E 543) listed in the technical sections of the specifications. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA requirements. The policy applies to the specific laboratory performing the actual testing, not just the "Corporate Office."

1.11.3 Laboratory Accreditation Authorities: Laboratory Accreditation Authorities include the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology, the American Association of State Highway and Transportation Officials (AASHTO), International Accreditation Services, Inc. (IAS), U. S. Army Corps of Engineers Materials Testing Center (MTC), and the American Association for Laboratory Accreditation (A2LA).

1.11.4 Capability Check: The Contracting Officer retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician's testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth by the Laboratory Accreditation Authorities and the requirements found in this contract.

1.11.5 Test Results: Cite applicable tests or analytical procedures used. Provide actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. If the item fails to conform, notify the Contracting Officer immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable. Test results shall be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the Contracting Officer as part of the Contractor's Daily Production Report. Submit the day after receipt of the signed reports, certifications, and other documentation.

## 1.12 QC CERTIFICATIONS

1.12.1 Contractor Quality Control Report Certification: Each CQC Report shall contain the following statement: "On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used and work

performed during this reporting period is in compliance with the contract submittals, drawings and specifications to the best of my knowledge except as noted in this report."

1.12.2 Invoice Certification: Furnish a certificate to the Contracting Officer with each payment request, signed by the QCM, attesting that as-built drawings are current and attesting that the work for which payment is requested, including stored material, is in compliance with contract requirements.

1.12.3 Completion Certification: Upon completion of work on a task order issued under this contract, the QCM shall submit a certificate to the Contracting Officer attesting that testing has been performed and is in compliance and that work has been completed and inspected and is in compliance with the contract specifications.

### 1.13 COMPLETION INSPECTIONS

1.13.1 Punch-List Inspection: Near the completion of all work or any increment thereof established by a completion time stated in the Contract clause "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the QCM shall conduct an inspection of the work performed under a contract task order, or project when there are multiple facilities or locations on a contract task order, and develop a punch list of items which do not conform to the contract and task order approved drawings and specifications. Include in the punch list any remaining items of the "Rework Items List", which were not corrected prior to the Punch-List inspection. The punch list shall include the estimated date by which the deficiencies will be corrected. A copy of the completed punch list shall be provided to the FSC Inspection Branch Engineering Technician and Contracting Officer for review two working days prior to scheduling a "Pre-Final Inspection." The QCM or staff shall make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the FSC Inspection Branch Engineering Technician that the task order or projects under a task order are ready for the "Pre-Final Inspection."

1.13.2 Pre-Final Inspection: The Contracting Officer, FSC Inspection Branch Engineering Technician, customer, end user and QCM will perform this inspection to verify that the task order requirements are complete. Notice shall be given to the FSC Inspection Branch Engineering Technician at least 2-calendar days prior to the "Pre-Final Inspection." A Government pre-final punch list may be developed as a result of this inspection. The QCM shall ensure that all items on this list are corrected prior to notifying the Government that a "Final Inspection" is scheduled. Any items noted on the "Pre-Final" inspection shall be corrected in a timely manner and shall be accomplished before the contract task order completion date.

1.13.3 Final Acceptance Inspection: The QCM, PS, or other Contractor management personnel and the FSC Inspection Branch Engineering Technician will be in attendance at this inspection. The Contracting Officer and customer may also attend this inspection. The Final Acceptance Inspection will be formally scheduled by the Contractor after all discrepancies on "Pre-Final Inspection" have been addresses, corrected and all work is found to be complete. Notice shall be given to the FSC Inspection Branch Engineering Technician at least 7-calendar days prior to the final inspection. The notice shall state that all specific items previously identified to the Contractor as being unacceptable will be complete by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract task order work acceptably completed for this inspection and by the contract task order "Completion Due Date" will be cause for the Contracting Officer to charge liquidated damages to the Contractor for the Government's in accordance with the contract clause " Liquidated Damages – Construction."

### 1.14 DOCUMENTATION

1.14.1 Maintain current and complete records of on-site and off-site QC Program operations and activities. The forms identified under the paragraph "INFORMATION FOR THE CONTRACTING OFFICER" shall be used. Contractor's Daily Production Reports are required for each day work is performed. Account for each calendar day from the start of work on a task order project through "Final Acceptance Inspection." Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The PS and the QCM must prepare and sign the Contractor Production and CQC Reports, respectively. The reporting of work shall be identified by terminology consistent with the approved contract task order construction schedule. The "remarks" section in this report contains pertinent information, including directions received, problems encountered during construction, work progress and delays, conflicts or errors in

the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors at the work site. For each remark given, identify the Schedule Activity No. that is associated with the remark.

1.14.2 Quality Control Validation: Establish and maintain the following in a series of three ring binders. Binders shall be divided and assembled in tabular format. These binders shall be readily available to the Government's Quality Assurance Team during all business hours. Provide the following information:

- a. All completed Preparatory and Initial Phase Checklists, arranged by specification section.
- b. All milestone inspections, arranged by Activity/Event Number.
- c. A current up-to-date copy of the Testing and Plan Log with supporting field test reports, arranged by specification section.
- d. Copies of all contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.
- e. A current up-to-date copy of the Rework Items List.
- f. Maintain up-to-date copies of all punch lists issued by the QC Staff on the Contractor and Subcontractors and all punch lists issued by the FSC Inspection Branch Engineering Technician.

1.14.2 As-Built Shop Drawings: When Record Drawings are specified in a contract task order or when the Government provides as-built drawings, the QCM shall review the Record Drawings or Government provided as-built drawings for accuracy prior to start of work. The Record Drawings or Government provided as-built drawings shall be kept current on a daily basis and marked to show deviations and revisions. Ensure each deviation or revision has been identified with the appropriate modifying documentation, e.g. task order number, modification number, RFI number, etc. The QCM shall initial each deviation or revision. Upon completion of work, the QCM shall submit the Record Drawings or Government provided as-built drawings as red lined as-built drawings in accordance with contract Section 01 78 00 CLOSEOUT SUBMITTALS.

#### 1.15 NOTIFICATION ON NON-COMPLIANCE

1.15.1 The Contracting Officer will notify the Contractor of any non-compliant work performed under a contract task order with accompanying comments for corrective action. The Contractor shall take immediate corrective action. If the Contractor fails or refuses to correct the non-compliant work, the Contracting Officer will issue a non compliance notice. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not request for damages the Contractor has incurred due to such stop orders, or submit a request for a time extension, for excess costs, or for any other damages.

### **PART 2 PRODUCTS**

Not Used.

### **PART 3 EXECUTION**

Not Used.

-- End of Section --

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**SECTION 01 57 19.00 20**

**TEMPORARY ENVIRONMENTAL CONTROLS  
02/10**

**PART 1 GENERAL**

For information in regards to the environment at MCB Camp Pendleton Environmental Security visit:  
<http://www.pendleton.usmc.mil/base/environmental/>

**1.1 REFERENCES**

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

**U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)**

|                  |   |
|------------------|---|
| EPA 530/F-93/004 | (1993; Rev O; Updates I, II, IIA, IIB, and III) Test Methods for Evaluating Solid Waste (Vol IA, IB, IC, and II) (SW-846) |
| EPA 833-R-060-04 | (2000) Developing Your Storm Water Pollution Prevention Plan, a Guide for Construction Sites                              |

**U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)**

|                       |   |
|-----------------------|---|
| 29 CFR 1910           | Occupational Safety and Health Standards  |
| 29 CFR 1910.120       | Hazardous Waste Operations and Emergency Response   |
| 40 CFR 112            | Oil Pollution Prevention  |
| 40 CFR 122.26         | Storm Water Discharges (Applicable to Great State of California NPDES Programs, see section 123.25) |
| 40 CFR 241            | Guidelines for Disposal of Solid Waste  |
| 40 CFR 243            | Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste |
| 40 CFR 258 Subtitle D | Landfill Requirements   |
| 40 CFR 260            | Hazardous Waste Management System: General  |
| 40 CFR 261            | Identification and Listing of Hazardous Waste   |
| 40 CFR 262            | Standards Applicable to Generators of Hazardous Waste   |
| 40 CFR 263            | Standards Applicable to Transporters of Hazardous Waste   |

|                      |  |
|----------------------|--|
| 40 CFR 264           | Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities  |
| 40 CFR 265           | Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities                             |
| 40 CFR 266           | Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities                        |
| 40 CFR 268           | Land Disposal Restrictions   |
| 40 CFR 270           | EPA Administered Permit Programs: The Hazardous Waste Permit Program   |
| 40 CFR 27            | Requirements for Authorization of Great State of California Hazardous Waste Programs   |
| 40 CFR 272           | Approved Great State of California Hazardous Waste Management Programs   |
| 40 CFR 273           | Standards For Universal Waste Management   |
| 40 CFR 279           | Standards for the Management of Used Oil   |
| 40 CFR 280           | Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)                           |
| 40 CFR 300           | National Oil and Hazardous Substances Pollution Contingency Plan   |
| 40 CFR 355           | Emergency Planning and Notification  |
| 40 CFR 372-SUBPART D | Specific Toxic Chemical Listings   |
| 40 CFR 761           | Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions                                   |
| 40 CFR 82            | Protection of Stratospheric Ozone  |
| 49 CFR 171           | General Information, Regulations, and Definitions  |
| 49 CFR 172           | Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements |
| 49 CFR 173           | Shippers - General Requirements for Shipments and Packagings   |
| 49 CFR 178           | Specifications for Packagings  |

## 1.2 DEFINITIONS

1.2.1 Sediment: Soil and other debris that has eroded and has been transported by runoff water or wind.

1.2.2 Solid Waste: Garbage, refuse, debris, sludge, or other discharged material, including solid, liquid, semisolid, or contained gaseous materials resulting from domestic, industrial, commercial, mining, or agricultural operations. Types of solid waste typically generated at construction sites may include:

- a. Green Waste: The vegetative matter from landscaping, clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.
- b. Surplus Soil: Existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included.
- c. Debris: Non-hazardous solid material generated during the construction, demolition, or renovation of a structure which exceeds 60 mm (2.5 inch) particle size that is a manufactured object; plant or animal matter; or natural geologic material (e.g. cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.
- d. Wood: Dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated and/or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included.
- e. Scrap Metal: Scrap and excess ferrous and non-ferrous metals such as reinforcing steel, structural shapes, pipe and wire that are recovered or collected and disposed of as scrap. Scrap metal meeting the definition of hazardous material or hazardous waste is not included.
- f. Paint Cans: Metal cans that are empty of paints, solvents, thinners and adhesives. If permitted by the paint can label, a thin dry film may remain in the can.
- g. Recyclables: Materials, equipment and assemblies such as doors, windows, door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable. Metal meeting the definition of lead contaminated or lead based paint contaminated may not be included as recyclable if sold to a scrap metal company. Paint cans may be included as recyclable if sold to a scrap metal company.
- h. Hazardous Waste: By definition, to be a hazardous waste a material must first meet the definition of a solid waste. Hazardous waste and hazardous debris are special cases of solid waste. They have additional regulatory controls and must be handled separately. They are thus defined separately in this document. Hazardous waste may not be disposed of at any MCB Camp Pendleton landfill and must be disposed of at an approved disposal site.

1.2.3 Material not regulated as solid waste are nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

1.2.4 Hazardous Debris: As defined in Solid Waste paragraph, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) per 40 CFR 261; or debris that exhibits a characteristic of hazardous waste per 40 CFR 261.

1.2.5 Chemical Wastes: This includes salts, acids, alkalizes, herbicides, pesticides, and organic chemicals.

1.2.6 Garbage: Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.

1.2.7 Hazardous Waste: Any discarded material, liquid, solid, or gas, which meets the definition of hazardous material or is designated hazardous waste by the Environmental Protection Agency or Great State of California Hazardous Control Authority as defined in 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 268, 40 CFR 270, 40 CFR 271, 40 CFR 272, 40 CFR 273, 40 CFR 279, and 40 CFR 280.

1.2.8 Hazardous Materials: Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172.

1.2.8.1 Hazardous material is any material that:

- a. Is regulated as a hazardous material per 49 CFR 173, or
- b. Requires a Material Safety Data Sheet (MSDS) per 29 CFR 1910.120, or
- c. During end use, treatment, handling, packaging, storage, transpiration, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D.

1.2.8.2 Designation of a material by this definition, when separately regulated or controlled by other instructions or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this instruction for "control" purposes. Such material include ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs). Nonetheless, the exposure may occur in the manufacture, storage, use and demilitarization of these items.

1.2.9 Waste Hazardous Material (WHM): Any waste material which because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment and which has been so designated. Used oil not containing any hazardous waste, as defined above, falls under this definition.

1.2.10 Oily Waste: Those materials which are, or were, mixed with used oil and have become separated from that used oil. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, used oil and may be appropriately tested and discarded in a manner which is in compliance with California State Water Resource Control Board, and other Great State of California and local requirements.

1.2.10.1 This definition includes materials such as oily rags, "kitty litter" absorbent clay and organic absorbent material. These materials may be disposed of at an approved landfill off of MCB Camp Pendleton provided that:

- a. It is not prohibited in other Great State of California regulations or local ordinances
- b. The amount generated is "de minimus" (a small amount)
- c. It is the result of minor leaks or spills resulting from normal process operations
- d. All free-flowing oil has been removed to the practical extent possible
- e. Large quantities of this material, generated as a result of a major spill or in lieu of proper maintenance of the processing equipment, are a solid waste. As a solid waste, a hazardous waste determination must be performed prior to disposal. As this can be an expensive process, it is recommended that this type of waste be minimized through good housekeeping practices and employee education.

1.2.11 Regulated Waste: Those solid waste that have specific additional Federal, Great State of California, or local controls for handling, storage, or disposal.

1.2.12 Class I Ozone Depleting Substance (ODS):

1.2.12.1 Class I ODS is defined in Section 602(a) of The Clean Air Act and includes the following chemicals:

- chlorofluorocarbon-11 (CFC-11)
- chlorofluorocarbon-12 (CFC-12)
- chlorofluorocarbon-13 (CFC-13)
- chlorofluorocarbon-111 (CFC-111)
- chlorofluorocarbon-112 (CFC-112)
- chlorofluorocarbon-113 (CFC-113)
- chlorofluorocarbon-114 (CFC-114)
- chlorofluorocarbon-115 (CFC-115)
- chlorofluorocarbon-211 (CFC-211)
- chlorofluorocarbon-212 (CFC-212)
- chlorofluorocarbon-213 (CFC-213)
- chlorofluorocarbon-214 (CFC-214)
- chlorofluorocarbon-215 (CFC-215)
- chlorofluorocarbon-216 (CFC-216)
- chlorofluorocarbon-217 (CFC-217)
- chlorofluorocarbon-500 (CFC-500)
- chlorofluorocarbon-502 (CFC-502)
- chlorofluorocarbon-503 (CFC-503)
- halon-1211
- halon-1301
- halon-2402
- carbon tetrachloride
- methyl bromide
- methyl chloroform

1.2.12.2 Class II ODS is defined in Section 602(s) of The Clean Air Act and includes the following chemicals:

- hydrochlorofluorocarbon-21 (HCFC-21)
- hydrochlorofluorocarbon-22 (HCFC-22)
- hydrochlorofluorocarbon-31 (HCFC-31)
- hydrochlorofluorocarbon-121 (HCFC-121)
- hydrochlorofluorocarbon-122 (HCFC-122)
- hydrochlorofluorocarbon-123 (HCFC-123)
- hydrochlorofluorocarbon-124 (HCFC-124)
- hydrochlorofluorocarbon-131 (HCFC-131)
- hydrochlorofluorocarbon-132 (HCFC-132)
- hydrochlorofluorocarbon-133 (HCFC-133)
- hydrochlorofluorocarbon-141 (HCFC-141)
- hydrochlorofluorocarbon-142 (HCFC-142)
- hydrochlorofluorocarbon-221 (HCFC-221)
- hydrochlorofluorocarbon-222 (HCFC-222)
- hydrochlorofluorocarbon-223 (HCFC-223)
- hydrochlorofluorocarbon-224 (HCFC-224)
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hydrochlorofluorocarbon-244 (HCFC-244)  
hydrochlorofluorocarbon-251 (HCFC-251)  
hydrochlorofluorocarbon-252 (HCFC-252)  
hydrochlorofluorocarbon-253 (HCFC-253)  
hydrochlorofluorocarbon-261 (HCFC-261)  
hydrochlorofluorocarbon-262 (HCFC-262)  
hydrochlorofluorocarbon-271 (HCFC-271)

1.2.13 Universal Waste: The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (e.g., thermostats) and lamps (e.g., fluorescent bulbs). The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier for universal waste handlers to collect these items and send them for recycling or proper disposal. These regulations can be found at 40 CFR 273.

### 1.3 ENVIRONMENTAL PROTECTION REQUIREMENTS

1.3.1 Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during normal construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Comply with Federal, Great State of California, San Diego County, MCB Camp Pendleton Environmental Security Office, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

1.3.1.1 The Contractor may be required to promptly conduct tests and procedures for the purpose of assessing whether construction operations are in compliance with applicable environmental laws. Analytical work shall be done by qualified laboratories; and where required by law, the laboratories shall be certified.

#### 1.4.2 Environmental Compliance Assessment Training and Tracking System (ECATTS)

1. The Environmental Manager is responsible for environmental compliance on projects. The Environmental Manager shall complete ECATTS training prior to starting on-site work under this contract. Training can be accomplished at <http://navfac.ecatts.com>. If personnel changes occur for any of these positions after starting work, replacement personnel shall complete ECATTS training within 14-calendar days prior to start of work on a task order project.
2. Submit an ECATTS certificate of completion for personnel who have completed the required "Environmental Compliance Assessment Training and Tracking System (ECATTS)" training to the Contracting Officer within 7-calendar days after receiving a certification of training. This training is web-based and can be accessed from any computer with Internet access using the following instructions.
3. Register for NAVFAC Environmental Compliance Training and Tracking System, by logging on to <http://navfac.ecatts.com/>. Obtain the password for registration from the Contracting Officer.
4. This training has been structured to allow Contractor personnel to receive credit under this contract and also to carry forward credit to future contracts. The Contractor shall ensure that the Environmental Manager reviews their training plans for new modules or updated training requirements. Some training modules are tailored for specific Great State of California regulatory requirements; therefore, if the Contractor is working in multiple

states they will be required to re-take modules tailored to the Great State of California where the contract work is being performed.

5. ECATTS is available for use by all Contractor and subcontractor personnel associated with this contract. All Contractor and subcontractor personnel are encouraged (but not required) to take the training and may do so at their discretion.

1.3.2 Conformance with the Environmental Management System: The Contractor shall perform work under this contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS). The Contractor shall perform work in a manner that conforms to objectives and targets, environmental programs and operational controls identified by the EMS. The Contractor will provide monitoring and measurement information as necessary to address environmental performance relative to environmental, energy, and transportation management goals. In the event an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, the Contractor shall take corrective and/or preventative actions. In addition, the Contractor shall ensure that its employees are aware of their roles and responsibilities under the EMS and how these EMS roles and responsibilities affect work performed under the contract.

#### 1.4 QUALITY ASSURANCE

1.5.1 Preconstruction Survey: The Contractor must schedule and perform a Preconstruction Survey of the task order project site prior to mobilization and start of work with the Contracting Officer, and take photographs showing existing environmental conditions in and adjacent to the site. Submit a report for the record.

##### 1.4.2 Regulatory Notifications

1.5.2.1 The Contractor is responsible for all regulatory notification requirements in accordance with Federal, Great State of California, San Diego County, MCB Camp Pendleton Environmental Security Office, and local regulations. In cases where MCB Camp Pendleton must also provide public notification (such as stormwater permitting), the Contractor must coordinate with the Contracting Officer and MCB Camp Pendleton Environmental Security Office. The Contractor shall submit copies of all regulatory notifications to the Contracting Officer prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all inclusive): demolition, renovation, NPDES defined site work, remediation of controlled substances (asbestos, hazardous waste, lead paint).

1.4.2.2 The Contractor shall follow, plan for, coordinate efforts and implement the regulations as specified in a category exclusion issued by MCB Camp Pendleton Environmental Security Office.

##### 1.4.3 Environmental Brief

1.4.3.1 Attend an environmental briefs as required. Provide the following information: types, quantities, and use of hazardous materials that will be brought onto the activity; types and quantities of wastes or wastewater that may be generated during the contract. Discuss the results of the Preconstruction Survey at this time.

1.4.3.2 Prior to initiating any work on site, meet with the Contracting Officer and activity environmental staff to discuss the proposed Environmental Management Plan. Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural resources, required reports, required permits, permit requirements, and other measures to be taken.

1.4.4 Environmental Manager: Appoint in writing an Environmental Manager for the contract. The Environmental Manager will be directly responsible for coordinating Contractor compliance with all Federal, Great State of California, San Diego County, MCB Camp Pendleton Environmental Security Office, and other local requirements. The Environmental Manager will ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, manifesting, and disposal); implement the Environmental Management Plan; ensure that all environmental permits are obtained, maintained, and closed out; ensure compliance with Storm Water Program Management requirements; ensure compliance with Hazardous Materials (storage, handling, and reporting) requirements;

and coordinate any remediation of regulated substances (lead, asbestos, PCB transformers). This can be a collateral position that one of the Contractor's management team may assume the responsibility; however the person in this position must be trained to adequately accomplish the following duties: ensure waste segregation and storage compatibility requirements are met; inspect and manage satellite accumulation areas; ensure only authorized personnel add wastes to containers; ensure all Contractor personnel are trained in 40 CFR requirements in accordance with their position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out.

1.4.5 Contractor 40 CFR Employee Training Records: Prepare and maintain employee training records throughout the term of the contract meeting applicable 40 CFR requirements. The Contractor will ensure every employee completes a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures compliance with all Federal, Great State of California, San Diego County, MCB Camp Pendleton Environmental Security Office, and local regulatory requirements for RCRA Large Quantity Generator. The Contractor will provide a position description for each employee, to include subcontractor employees, based on the Davis-Bacon Wage Rate designation or other equivalent method, evaluating the employee's association with hazardous and regulated wastes. The position description will include training requirements as defined in 40 CFR 265 for a Large Quantity Generator facility. Submit these training records to the Contracting Officer at the conclusion of the project, unless otherwise directed.

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

### **3.1 ENVIRONMENTAL MANAGEMENT PLAN**

3.1.1 During the Preperformance Conference Meeting and at task order preconstruction meetings the Contractor shall meet with the Contracting Officer to discuss the proposed Environmental Protection Plan and develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural resources, required reports, and other measures to be taken. The Contractor's Environmental Plan shall incorporate construction related objectives and targets from the MCB Camp Pendleton's Environmental Management System. The Environmental Management Plan shall be submitted in the following format and shall include the elements specified below.

#### **a) Description of the Environmental Management Plan**

##### **1. General overview and purpose**

- i.** A brief description of each specific plan required by environmental permit or elsewhere in this contract.
- ii.** The duties and level of authority assigned to the person(s) on the job site that oversee environmental compliance.
- iii.** A copy of any standard or project specific operating procedures that will be used to effectively manage and protect the environment on the project site.
- iv.** Communication and training procedures that will be used to convey environmental management requirements to Contractor employees and subcontractors.
- v.** Emergency contact information contact information (office phone number, cell phone number, and e-mail address).

##### **2. General site information**

3. A letter signed by an officer of the firm appointing the Environmental Manager and stating that he/she is responsible for managing and implementing the Environmental Program as described in this contract. Include in this letter the Environmental Manager's authority to direct the removal and replacement of non-conforming work.
- b) Management of Natural Resources
    - i. Land resources
    - ii. Tree protection
    - iii. Replacement of damaged landscape features
    - iv. Temporary construction
    - v. Stream crossings
    - vi. Fish and wildlife resources
    - vii. Wetland areas
  - c) Protection of Historical and Archaeological Resources
    - i. Objectives
    - ii. Methods
  - d) Storm Water Management and Control
    - i. Ground cover
    - ii. Erodible soils
    - iii. Temporary measures
      - (a) Mechanical retardation and control of runoff
      - (b) Vegetation and mulch
    - iv. Effective selection, implementation and maintenance of Best Management Practices (BMPs).
  - e) Protection of the Environment from Waste Derived from Contractor Operations
    - i. Control and disposal of solid and sanitary waste. If Section 01 74 19.05 20 is included in the contract, submit the plan required by that section as part of the Environmental Management Plan.
    - ii. Control and disposal of hazardous waste (Hazardous Waste Management Section)
    - iii. This item will consist of the management procedures for all hazardous waste to be generated. The elements of those procedures will coincide with the Activity Hazardous Waste Management Plan. A copy of the Activity Hazardous Waste Management Plan will be provided by the Contracting Officer. As a minimum, include the following:

- (a) Procedures to be employed to ensure a written waste determination is made for appropriate wastes which are to be generated;
  - (b) Sampling/analysis plan;
  - (c) Methods of hazardous waste accumulation/storage (i.e., in tanks and/or containers);
  - (d) Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless specifically noted);
  - (e) Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions (40 CFR 268);
  - (f) Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and the like;
  - (g) Used oil management procedures in accordance with 40 CFR 279;
  - (h) Pollution prevention\hazardous waste minimization procedures;
  - (i) Plans for the disposal of hazardous waste by permitted facilities;
  - (j) Procedures to be employed to ensure all required employee training records are maintained.
- f) Prevention of Releases to the Environment
- i. Procedures to prevent releases to the environment
  - ii. Notifications in the event of a release to the environment
- g) Regulatory Notification and Permits

List what notifications and permit applications must be made. Demonstrate that those permits have been obtained by including copies of all applicable, environmental permits.

3.1.2 Environmental Protection Plan Review: Within 15-calendar days after award of this contract, submit the proposed Environmental Management Plan for further discussion, review, and approval. Commencement of work will not begin until the Environmental Management Plan has been approved by the Contracting Officer.

### 3.1.2 Licenses and Permits

3.1.2.1 Obtain licenses and permits pursuant to the "Permits and Responsibilities" FAR Clause 52.236-7.

3.1.2.2 No permits will be obtained by the Contracting Officer.

3.1.2.3 Where required by the Great State of California regulatory authority, the inspections and certifications must be provided through the services of a Professional Engineer (PE) that is registered in the Great State of California. Where a PE is not required, the individual must be otherwise qualified by other current Great State of California licensure, specific training and prior experience (minimum 5 years). As a part of the Quality Control Plan, which is required to be submitted for approval by the quality control section, provide a sub item containing the name, appropriate professional registration or license number, address, and telephone number of the professionals or other qualified persons who will be performing the inspections and certifications for each permit.

## 3.2 PROTECTION OF NATURAL RESOURCES

3.2.1 Preserve the natural resources within and outside of the task order project boundaries. Restore project site and adjacent area to a equivalent or improved condition upon completion of work. Confine construction activities to within the limits of the work specified in a category exclusion or permit. If the work is near streams, lakes, or other waterways, conform to the national permitting requirements of the Clean Water Act.

3.2.1.1 Do not disturb fish and wildlife. Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as indicated or specified in a task order.

3.2.1.2 Except in areas to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without the Contracting Officer's permission. Do not fasten or attach ropes, cables, or guys to existing nearby trees for anchorages unless authorized by the Contracting Officer.

3.2.1.3 Protect existing trees which are to remain. Remove displaced rocks from uncleared areas. Remove trees and other landscape features scarred or damaged by equipment operations, and replace with equivalent, undamaged trees and landscape features in accordance with MCB Camp Pendleton's Base Exterior Architectural Plan (BEAP). Obtain Contracting Officer's approval before replacement.

3.2.1.4 Contracting Officer' and MCB Camp Pendleton Environmental Security Office approval is required before any equipment will be permitted to ford live streams. In areas where frequent crossings are required, alternative methods such as the installation of temporary culverts or bridges may be performed. Obtain Contracting Officer's approval prior to installation. Remove temporary culverts or bridges upon completion of work, and repair the area to its original condition unless otherwise specified by Contracting Officer or MCB Camp Pendleton Environmental Security Office.

### 3.2.2 Erosion and Sediment Control Measures

3.2.2.1 Burnoff of the ground cover is not permitted.

3.2.2.2 Protection of Erodible Soils: Immediately finish the earthwork brought to a final grade, as indicated or specified in a task order. Immediately protect the side slopes and back slopes upon completion of rough grading. Plan and conduct earthwork to minimize the duration of exposure of unprotected soils.

### 3.2.2.3 Temporary Protection of Erodible Soils

a. Use the following methods to prevent erosion and control sedimentation:

i. Mechanical Retardation and Control of Runoff: As specified in a task order, mechanically retard and control the rate of runoff from the construction site. This includes construction of diversion ditches, benches, berms, and use of silt fences and straw bales to retard and divert runoff to protected drainage courses.

b. Sediment Basins

i. As specified in a task order, trap sediment in temporary sediment basins. Select a basin size to accommodate the runoff of a local 100-year storm. Pump dry and remove the accumulated sediment, after each storm. Use a paved weir or vertical overflow pipe for overflow. Remove collected sediment from the site. Institute effluent quality monitoring programs.

ii. Install, inspect, and maintain best management practices (BMPs) on all task orders or perform controls as required by a general permit. Prepare BMP Inspection Reports as required by a general permit. f required by the permit, include those inspection reports.

c. Vegetation and Mulch

- i. When specified on a task order, provide temporary protection on sides and back slopes as soon as rough grading is completed or sufficient soil is exposed to require erosion protection. Protect slopes by accelerated growth of permanent vegetation, temporary vegetation, mulching, or netting. Stabilize slopes by hydroseeding, anchoring mulch in place, covering with anchored netting, sodding, or such combination of these and other methods necessary for effective erosion control.
- ii. Seeding: When specified on a task order, provide new seeding where ground is disturbed. The seeding used will be specified on a task order. Include topsoil or nutrient during the seeding operation necessary to establish or reestablish a suitable stand of grass.

3.2.2 Storm Water Protection: Follow the specifications on Section 01 57 23 “Temporary Storm Water Pollution Control.”

### 3.3 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

3.3.1 Carefully protect in-place known historical and archaeological items or human skeletal remains. Stop work and immediately report discovered historical and archaeological items or human skeletal remains that have been found in the course of work to the Contracting Officer and MCB Camp Pendleton Environmental Security Office. The Government retains ownership and control over historical and archaeological resources.

### 3.4 SOLID WASTE MANAGEMENT PLAN (WMP)

3.4.1 Develop a Waste Management Plan that outlines how waste management will be managed and disposed while work is performed on a task order. The WMP will be used generically for all awarded task orders. The WMP is subject to approval of the Contracting Officer before work may begin on this contract.

3.4.1.1 Solid Waste Management Report: Submit a solid waste disposal report to the Contracting Officer when disposing of solid waste at any MCB Camp Pendleton landfill. For each trip to a MCB Camp Pendleton landfill, the report will show the classification of solid waste, tonnage, location from where the solid waste originated, and name of the MCB Camp Pendleton landfill receiving the solid waste.

#### 3.4.1.2 Control and Management of Solid Wastes

- a. Pick up solid wastes, and place in covered containers which are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, leave the areas clean. Recycling is mandatory. Recycling aboard MCB Camp Pendleton can be coordinated with the Contracting Officer and the Base Recycling Center Manager. The Government, at its discretion, may allow the use of the Base landfills. If not, remove all solid waste from Government property and dispose off-site at an approved landfill at no additional cost to the Government. Solid waste disposed of off-site must comply with all Federal, San Diego County, Great State of California, and local regulations including 40 CFR 241, 40 CFR 243, and 40 CFR 258.
- b. Manage and dispose of spent hazardous material used in construction, including but not limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and used rags, as per environmental law.

3.4.1.3 Solid Waste Containers: The term “Container” means dumpsters, bins and roll-off’s. Contractor supplied containers must be equipped with secure lids or covers, be sightly in appearance (painted and maintained) and shall not leak. Keep lids on dumpsters and bins closed at all times, except when being loaded with trash and debris. Cover roll-off’s at the end of the work shift. Locate containers within the construction zone in accordance with the category exclusion and out of the public’s view. Empty containers at least once a week, or more frequently as needed to keep the site free of debris and trash. Do not put concrete, asphalt concrete, rocks, other inert materials or recyclables in containers.

### 3.5 CONTRACTOR HAZARDOUS MATERIAL INVENTORY LOG

3.5.1 Submit the "Contractor Hazardous Material Inventory Log"(found at: <http://www.wbdg.org/ccb/NAVGRAPH/graphdoc.pdf>), which provides information required by (EPCRA Sections 312 and 313) along with corresponding Material Safety Data Sheets (MSDS) to the Contracting Officer at the start and at the end of construction (30 days from final acceptance), and update no later than January 31 of each calendar year during the life of the contract. Documentation for any spills/releases, environmental reports or off-site transfers may be requested by the Contracting Officer.

#### 3.5.2 Disposal Documentation for Hazardous and Regulated Waste

3.5.2.1 Manifest, pack, ship and dispose of hazardous or toxic waste and universal waste that is generated as a result of construction in accordance with the generating facilities generator status under the Resource Conservation and Recovery Act. Manifest hazardous waste through MCB Environmental Security Office

3.5.2.2 Submit a copy of the applicable EPA and state permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities. Hazardous or toxic waste manifest must be reviewed, signed, and approved by the MCB Camp Pendleton Environmental Security Office before the Contractor may ship waste. To obtain specific disposal instructions the Contractor must coordinate with the Environmental Security Office.

### 3.6 POLLUTION PREVENTION/HAZARDOUS WASTE MINIMIZATION

3.6.1 Minimize the use of hazardous materials and the generation of hazardous waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the Environmental Management Plan. Consult with the activity Environmental Security Office for suggestions and to obtain a copy of the installation's pollution prevention/hazardous waste minimization plan for reference material when preparing this part of the plan. If Environmental Management Plan does not exist, obtain information by contacting the Contracting Officer. Describe the types of the hazardous materials expected to be used during construction when requesting information.

### 3.7 WHM/HW MATERIALS PROHIBITION

3.7.1 No waste hazardous material or hazardous waste shall be disposed of on Government property. No hazardous material shall be brought onto Government property that does not have the approval of the Contracting Officer and that is not directly related to requirements as specified in this contract. The Government is not responsible for disposal of Contractor's waste material brought on the job site and not required in the performance of this contract. The intent of this provision is to dispose of that waste identified as waste hazardous material/hazardous waste as defined herein that was generated as part of this contract and existed within the boundary of the contract limits and not brought in from offsite by the Contractor. Incidental materials used to support the contract including, but not limited to aerosol cans, waste paint, cleaning solvents, contaminated brushes, rags, clothing, etc. are the responsibility of the Contractor. The list is illustrative rather than inclusive. The Contractor is not authorized to discharge any materials to sanitary sewer, storm drain, or to the river or conduct waste treatment or disposal on government property without written approval of the Contracting Officer.

### 3.8 HAZARDOUS MATERIAL MANAGEMENT

3.8.1 Include hazardous material control procedures in the Site Safety and Health Plan. Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. Submit a MSDS and estimated quantities to be used for each hazardous material to the Contracting Officer prior to bringing the material on base. Typical materials requiring MSDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. At the end of the project, provide the Contracting Officer with the maximum quantity of each material that was present at the site at any one time, the dates the material was present, the amount of each material that was used during the project, and how the material was used. Ensure that hazardous materials are utilized in a manner that will minimize the amount of hazardous waste that is generated. Ensure that all containers of hazardous materials have NFPA labels or their equivalent. Keep copies of the MSDS for hazardous

materials on site at all times and provide them to the Contracting Officer at the end a task order project. Certify that all hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste per 40 CFR 261.

### 3.9 PETROLEUM PRODUCTS AND REFUELING

3.9.1 Conduct the fueling and lubricating of equipment and motor vehicles in a manner that protects against spills and evaporation. Manage all used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while on-site exhibits a characteristic of hazardous waste. Used oil containing 1000 parts per million of solvents will be considered a hazardous waste and disposed of at Contractor's expense. Used oil mixed with a hazardous waste will also be considered a hazardous waste.

### 3.10 OILY AND HAZARDOUS SUBSTANCES

3.10.1 Prevent oil or hazardous substances from entering the ground, drainage areas, or navigable waters.

3.10.2 Inadvertent Discovery of Petroleum Contaminated Soil or Hazardous Wastes: If petroleum contaminated soil or suspected hazardous waste is found during construction that was not identified in a task order, the Contractor shall immediately notify the Contracting Officer. The Contractor shall not disturb this material until authorized by the Contracting Officer.

### 3.11 FUEL TANKS

3.11.1 Temporary fuel oil or petroleum storage tanks are not allowed to be stored on Government property.

### 3.12 RELEASES/SPILLS OF OIL AND HAZARDOUS SUBSTANCES

3.12.1 Exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated by environmental law. Maintain spill cleanup equipment and materials at the work site. In the event of a spill, take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the MCB Camp Pendleton Fire Department (dial 911), the Environmental Security Hazardous Waste Branch, and the Contracting Officer. If the Contractor's response is inadequate, the MCB Camp Pendleton Hazardous Waste Spill Team may respond.

3.12.2 The Contractor is responsible for verbal and written notifications as required by the 40 CFR 355, Great State of California, San Diego County, MCB Camp Pendleton Environmental Security and other local regulations. Spill response will be in accordance with 40 CFR 300 and with applicable Great State of California San Diego County, MCB Camp Pendleton Environmental Security and other local regulations. Contain and clean up these spills without cost to the Government. Provide copies of the written notification and documentation that a verbal notification was made within 20-calendar days. Maintain spill cleanup equipment and materials at the work site. Clean up all hazardous and non-hazardous (WHM) waste spills.

- a. The Contractor shall reimburse the government for all costs incurred including sample analysis materials, equipment, and labor if the government must initiate its own spill cleanup procedures, for Contractor responsible spills, when:
  - i. The Contractor has not begun spill cleanup procedure within one hour of spill discovery/occurrence, or
  - ii. If, in the government's judgment, the Contractor's spill cleanup is not adequately abating life threatening situation and/or is a threat to any body of water or environmentally sensitive areas.

### 3.13 CONTROL AND MANAGEMENT OF HAZARDOUS WASTES

3.13.1 Facility Hazardous Waste Generator Status: All work conducted within the boundaries of MCB Camp Pendleton and Naval Weapons Station Seal Beach Fallbrook Detachment must meet the regulatory requirements of this generator designation. The Contractor will comply with all provisions of Federal, Great State of California and local regulatory requirements applicable to this generator status regarding training and storage, handling, and disposal of all construction derived wastes.

3.13.2 Hazardous Waste/Debris Management: Identify all construction activities which will generate hazardous waste/debris. Provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of in accordance with all Federal, Great State of California, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268.

3.13.2.1 Hazardous waste will also be managed in accordance with the approved Hazardous Waste Management Section of the Environmental Protection Plan. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. Hazardous waste generated within the confines of Government facilities will be identified as being generated by the Government.

3.13.2.2 Prior to removal of any hazardous waste from Government property, all hazardous waste manifests must be signed by activity personnel from the Environmental Security Hazardous Waste Branch. No hazardous waste will be brought onto Government property. Provide to the Contracting Officer a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D. For hazardous wastes spills, verbally notify the Contracting Officer immediately.

a. Regulated Waste Storage/Satellite Accumulation/90 Day Storage Areas

b. If the work requires the temporary storage/collection of regulated or hazardous wastes, the Contractor will request the establishment of a Regulated Waste Storage Area, a Satellite Accumulation Area, or a 90 Day Storage Area at the point of generation. The Contractor must submit a request in writing to the Contracting Officer providing the following information:

Contract Number \_\_\_\_\_ Contractor \_\_\_\_\_  
Haz/Waste or  
Regulated Waste POC \_\_\_\_\_ Phone Number \_\_\_\_\_  
Type of Waste \_\_\_\_\_ Source of Waste \_\_\_\_\_  
Emergency POC \_\_\_\_\_ Phone Number \_\_\_\_\_  
Location of the Site: \_\_\_\_\_  
(Attach Site Plan to the Request)

a. Attach a waste determination form. Allow ten working days for processing this request. The designated area where waste is being stored shall be barricaded and a sign identifying as follows:

**DANGER - UNAUTHORIZED PERSONNEL KEEP OUT"**

3.13.3 Sampling and Analysis of HW

a. Waste Sampling: Sample waste in accordance with EPA 530/F-93/004. Each sampled drum or container will be clearly marked with the Contractor's identification number and cross referenced to the chemical analysis performed.

- b. Laboratory Analysis: Follow the analytical procedure and methods in accordance with the 40 CFR 261. The Contractor will provide all analytical results and reports to the Contracting Officer
- c. Analysis Type: Identify waste hazardous material/hazardous waste by analyzing for the following properties as a minimum: ignitability, corrosiveness, total chlorides, BTU value, PCBs, TCLP for heavy metals, and cyanide.

#### 3.13.4 Asbestos Certification

3.13.4.1 Items, components, or materials disturbed by or included in work under this contract may involve asbestos. Other materials in the general area around where work will be performed may contain asbestos.

3.13.4.2 Inadvertent discovery of non-disclosed asbestos that will result in an abatement action requires a change in scope before proceeding. Upon discovery of asbestos containing material not identified in a task order, the Contractor shall immediately stop all work that would generate further damage to the material, evacuate the asbestos exposed area, and notify the Contracting Officer for resolution of the situation prior to resuming normal work activities in the affected area. The Contractor will not remove or perform work on any asbestos containing materials without the prior approval of the Contracting Officer. The Contractor will not engage in any activity, which would remove or damage such materials or cause the generation of fibers from such materials.

3.13.4.3 Asbestos containing waste shall be managed and disposed of in accordance with Federal and Great State of California environmental laws. Asbestos containing waste shall be manifested through the Environmental Security Hazardous Waste Branch.

#### 3.13.5 Hazardous Waste Disposal

3.13.5.1 No hazardous, toxic, or universal waste shall be disposed or hazardous material abandoned on MCB Camp Pendleton or Naval Weapons Station Seal Beach Fallbrook Detachment. And unless otherwise noted in this contract, the Government is not responsible for disposal of Contractor generated waste material. The disposal of incidental materials used to accomplish the work including, but not limited to aerosol cans, waste paint, cleaning solvents, contaminated brushes, rags, clothing, etc. are the responsibility of the Contractor.

3.13.5.2 The Contractor is not authorized to discharge any materials to sanitary sewer, storm drain, or water way or conduct waste treatment or disposal on MCB Camp Pendleton or Naval Weapons Station Seal Beach Fallbrook Detachment.

3.13.5.3 Control of stored waste, packaging, sampling, analysis, and disposal in accordance with Federal and great State of California regulations.

#### 3.13.5.4 Responsibilities for Contractor's Disposal

- a. Contractor responsibilities include any generation of WHM/HW requiring Contractor disposal of solid waste or liquid.
- b. The Contractor agrees to provide all service necessary for the final treatment/disposal of the hazardous material/waste in accordance with all Federal, Great State of California and local laws and regulations, and the terms and conditions of a task order within sixty (60) days after the materials have been generated. These services will include all necessary personnel, labor, transportation, packaging, detailed analysis (if required for disposal, and/or transportation, including manifesting or completing waste profile sheets, equipment, and the compilation of all documentation is required).
- c. Contain all waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 268, 40 CFR 270, 40 CFR 272, 40 CFR 273, 40 CFR 279, 40 CFR 280, and 40 CFR 761.

- d. Obtaining a representative sample of the material generated for each job done to provide waste stream determination.
- e. Analyzing for each sample taken and providing analytical results to the Contracting Officer. Provide two copies of the results.
- f. Determine the DOT proper shipping names for all waste (each container requiring disposal) and will demonstrate how this determination is developed and supported by the sampling and analysis requirements contained herein to the Contracting Officer.

3.13.6 Class I and II ODS Prohibition: Class I and II ODS as defined and identified herein will not be used in the performance of this contract, nor be provided as part of the equipment. This prohibition will be considered to prevail over any other provision, specification, drawing, or referenced documents. Regulations related to the protection of stratosphere ozone may be found in 40 CFR 82.

3.13.2 Universal Waste/e-Waste Management: Universal waste including but not limited to some mercury containing building products such florescent lamps, mercury vapor lamps, high pressure sodium lamps, CRTs, batteries, aerosol paint containers, electrical equipment containing PCBs, and consumed electronic devices, shall be managed in accordance with applicable environmental law and installation instructions.

### 3.14 DUST CONTROL

3.14.1 Submit a Dust Control Plan for each task order project to the Contracting Officer within 15-calendar days after award of the task order for review and acceptance. The Contractor shall not mobilize or start work until the plan has been accepted.

3.14.2 The Dust Control Plan shall be developed using the 2010 Caltrans Standard Specifications Section 14 "Environmental Stewardship."

3.14.3 Keep dust down at all times, including during nonworking periods. Water excavation areas, haul roads, and other areas disturbed by operations. Dry power brooming will not be permitted on paved roads. Instead wet power brooming. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Do not unnecessarily shake bags of cement, concrete mortar, or plaster.

3.14.4 Dust Control Plan: Submit truck and material haul routes along with a plan for controlling dirt, from accumulating on roadways.

### 3.15 ABRASIVE BLASTING

#### 3.15.1 Blasting Operations

3.15.1.1 The use of silica sand is prohibited in sandblasting.

3.15.1.2 Employees performing the work shall wear the appropriate PPE. Perform work involving removal of hazardous material in accordance with 29 CFR 1910.

3.15.2 Disposal Requirements: Submit analytical results of the debris generated from abrasive blasting operations per paragraph entitled Laboratory Analysis of this section. Hazardous waste generated from blasting operations will be managed in accordance with paragraph entitled "Hazardous Waste\Debris Management" of this section and with the approved HWMP. Disposal of non-hazardous abrasive blasting debris will be in accordance with paragraph entitled, "Control and Disposal of Solid Wastes".

### 3.16 NOISE

3.16.1 Make the maximum use of low-noise emission products, as certified by the EPA. Blasting or use of explosives is not be permitted.

### 3.17 MERCURY MATERIALS

3.17.1 The use of mercury is prohibited, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in rubbish containers is prohibited. Remove mercury-containing materials and devices without breaking, pack to prevent breakage, and transport of MCB Camp Pendleton and Naval Weapons Station Seal Beach Fallbrook Detachment in an unbroken condition for disposal at an approved recycle facility. Immediately report to the Environmental Office and the Contracting Officer instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Contracting Officer.

3.17.2 Cleanup of a mercury spill shall not be recycled and shall be managed as a hazardous waste for disposal.

-- End of Section --

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## SECTION 01 57 20.00 10

### ENVIRONMENTAL PROTECTION 04/06

#### PART 1 GENERAL

##### 1.1 REFERENCES

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

#### U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1(2008) Safety and Health Requirements Manual

#### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328 Definitions of Waters of the United States of America

40 CFR 150 – 189 Pesticide Programs

40 CFR 260 Hazardous Waste Management System: General

40 CFR 261 Identification and Listing of Hazardous Waste

40 CFR 262 Standards Applicable to Generators of Hazardous Waste

40 CFR 279 Standards for the Management of Used Oil

40 CFR 302 Designation, Reportable Quantities, and Notification

40 CFR 355 Emergency Planning and Notification

## 1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage: Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection: Environmental protection is the prevention and control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste: Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, petroleum products, excess paint thinners (i.e. methylethylketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Land Application for Discharge Water: The term "Land Application" for discharge of water implies that the Contractor must discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into stormwater collection systems, sanitary wastewater collection systems or discharge into defined drainage areas, or discharge into the "Waters of the United States of America" must occur. Land Application must be in compliance with all applicable Federal, Great State of California, California State Waters Resources Control Board, San Diego County, MCB Camp Pendleton Environmental Security, and Naval Weapons Station Seal Beach, Fallbrook Detachment environmental laws and regulations.

1.2.5 Pesticide: Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, mitigating any pest, or is intended for use as a plant regulator, defoliant or desiccant.

1.2.6 Pests: The term "pests" means arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.7 Surface Discharge: The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, stormwater collection systems, creeks, and/or "Waters of the United States of America" and therefore, require a permit to discharge water from the governing agency.

1.2.8 Waters of the United States of America: All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.9 Wetlands: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLAND MANUAL.

### 1.3 GENERAL REQUIREMENTS

1.3.1 Minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work must be protected during the entire duration of contract task order work. Comply with all applicable Federal, Great State of California, California State Waters Resources Control Board, San Diego County, MCB Camp Pendleton Environmental Security, and Naval Weapons Station Seal Beach, Fallbrook Detachment environmental laws and regulations.

### 1.4 SUBCONTRACTORS

1.4.1 The Contractor shall ensure that their subcontractors are in compliance with the environmental requirements as stated herein.

### 1.5 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

1.5.1 Reference SECTION 01 35 40.00 20 "Environmental Management" for submittal requirements.

### 1.6 ENVIRONMENTAL PROTECTION PLAN

1.6.1 The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern must be defined within the Environmental Protection Plan. Address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but are considered necessary, must be identified and discussed. The Environmental Protection Plan must be maintained current and a copy must be posted on each contract task order project site.

1.6.1.1 The Contractor shall submit a contract specific Environmental Protection Plan that addresses the environmental controls that will be implemented for the general types of work to be performed as outlined in the technical sections found in this contract for review and approval of the Contracting Officer within 15-calendar days after award of this contract. The approved Environmental Protection Plan shall be applicable to all contract task orders for the duration of this contract within. The Contractor shall not mobilize, stage or store equipment and materials, nor begin work until after the plan has been approved.

1.6.1.2 In addition to the contract Environmental Protection Plan, the Contractor shall submit contract task order site specific Environmental Protection Plan for review and approval of the Contracting Officer within 15-calendar days after award of a contract task order. The contract site specific task order Environmental Protection Plan shall address the environmental controls that will be implemented and managed on a contract task order project. The Contractor shall not mobilize, stage or store equipment and materials, nor begin work until after the plan has been approved.

1.6.1 Compliance: The requirements found in this Section, or lack thereof, shall relieve the Contractor of compliance with any applicable Federal, Great State of California, California State Waters Resources Control Board, San Diego County, MCB Camp Pendleton Environmental Security, and Naval Weapons Station Seal Beach, Fallbrook Detachment environmental laws and regulations. During construction, the Contractor will be responsible for identifying, implementing, and submitting changes to the Environmental Protection Plan for review and approval by the Contracting Officer.

1.6.2 Contents: Include in the Environmental Protection Plan, but not limit it to, the following:

1.6.2.1 Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.

1.6.2.2 Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from a site, task order specific.

1.6.2.3 Name(s) and qualifications of person(s) responsible for training the Contractor's personnel and subcontractor's personnel.

1.6.2.4 Detailed description of the Contractor's Environmental Protection Plan personnel training program.

1.6.2.5 A Air Pollution Control Plan shall include in detail methods employed to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the contract task order project site.

1.6.3 Attachment: Attach to the Environmental Protection Plan, as an Attachment, copies of all applicable environmental permits, permit application packages, certifications, and other documentation.

1.7 Protection Features: This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities on a contract task order, the Contractor and the Contracting Officer will conduct a joint condition survey of the site. Prior to start of work, the Contractor will prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on Government furnished drawings or contract task order statement of work as environmental features requiring protection along with the condition of trees, shrubs and grassed areas that are locate within or adjacent to the immediate site of work, to include staging and storage areas, and access routes. This survey report will be signed by both the Contractor and the Contracting Officer upon mutual understanding as to its accuracy and completeness. The Contractor must protect those environmental features included in the survey report and any environmental features indicated in a Government furnished drawing(s) or contract task order statement of work

1.8 Special Environmental Requirements: Comply with all Category Exclusions issued on contract task order project.

1.9 Environmental Assessment of Contract Deviations: Any deviations from the contract task order drawings, plans and statement of work requested by the Contractor, and which may have an environmental impact, will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval period. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, e.g. if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.10 Notification: The Contracting Officer will notify the Contractor in writing of any observed noncompliance of Federal, Great State of California, California State Waters Resources Control Board, San Diego County, San Diego County Air Pollution Control District, MCB Camp Pendleton Environmental Security, and Naval Weapons Station Seal Beach, Fallbrook Detachment environmental laws and regulations. After receipt of such notice, the Contractor will provide documentation of corrective action for review and approval by the Contracting Officer within 7-calendar days of notification. Upon approval, the Contractor initiates the corrective action immediately. The Contracting Officer may issue an order stopping all or part of the work until corrective action has been taken. No time extensions will be granted or equitable adjustments allowed for any such suspensions.

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

3.1 Environmental Permits and Commitments: The Contractor, in accordance with the pre-priced hazardous material abatement ELINs, shall bare all costs for necessary permits to perform work as indicated in the Statement of Work

3.1.1 This paragraph supplements the Contractor's responsibility under the contract clause "PERMITS AND RESPONSIBILITIES." Comply with the terms and conditions found in a contract task order issued Category Exclusion and other NEPA documents as provided.

### 3.2 LAND RESOURCES

3.2.1 Confine all activities to areas defined by the contract task order drawings and statement of work. Identify land resources to be preserved within the work area prior to the beginning of mobilization, staging and storing of materials and equipment, and beginning of construction. Do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without prior approval. Provide effective protection for land and vegetation resources at all times, as defined in the following subparagraphs. Remove stone, soil, or other materials displaced into uncleared areas.

3.2.2 Work Area Limits: Mark the areas that are not to be disturbed prior to commencing construction activities. Mark areas within the general work area which are not to be disturbed. Mark and protect monuments and markers before construction operations commence. Markers shall be visible where construction operations are to be conducted during darkness. The Contractor's personnel must be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.3 Landscape: Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the contract task order drawings and statement of work that is to be preserved must be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. Restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.4 Erosion and Sediment Controls: Not applicable.

3.2.5 Contractor Facilities and Work Areas: Stage or store materials and equipment in areas designated on the contract task order site drawings, statement of work or as directed by the Contracting Officer. Temporary movement or relocation of the staging or storage area may be made only when approved by the Contracting Officer. Erosion and sediment controls must be provided to prevent sediment from entering nearby waters.

### 3.3 WATER RESOURCES

3.3.1 Monitor all water areas affected by construction activities to prevent pollution of surface and ground waters. Do not apply toxic or hazardous chemicals to soil or vegetation unless otherwise directed to do so by the Contracting Officer. For construction activities immediately adjacent to surface waters, the Contractor must be capable of quantifying sediment or pollutant loading in the surface water when required to do so by Clean Water Act permits.

3.3.2 Stream Crossings: Not applicable.

3.3.3 Wetlands: Do not enter, disturb, destroy, or allow discharge of contaminants or pollutants into any wetlands. The protection of wetlands as indicated on contract task order drawings or in the statement of work shall be the Contractor's responsibility. Authorization to enter specific wetlands as identified in the contract task order will not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

### 3.4 AIR RESOURCES

3.4.1 Equipment operation, activities, or processes will be in accordance with all Federal, Great State of California, and San Diego Air Pollution Control District air emission and performance laws and standards.

3.4.2 Particulates: Dust particles; aerosols and gaseous by-products used at construction sites, and any processing and preparation of materials on the construction site must be controlled at all times, including weekends, holidays and hours

when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, spoil areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, Great State of California, and San Diego Air Pollution Control District set air pollution standards to be exceeded or which would cause a hazard or a nuisance. Watering will be permitted to control particulates in the work area. Watering, to be efficient, must be repeated to keep the disturbed area damp at all times. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with all Federal, Great State of California and San Diego Air Pollution Control District visibility regulations.

3.4.3 Odors: Odors from construction activities must be controlled at all times. The odors must be in compliance with Federal, Great State of California, San Diego Air Pollution Control District regulations and other government environmental agencies regulations and may not constitute a health hazard.

3.4.4 Sound Intrusions: Keep construction activities under surveillance and control to minimize environment damage by noise. Comply with the provisions of the Federal, Great State of California and MCB Camp Pendleton Environmental Security Office regulations.

### 3.5 BURNING

3.5.1 Burning is prohibited on the Government premises.

### 3.6 WASTE DISPOSAL

3.6.1 Disposal of wastes will be as follows:

3.6.1.1 The Contractor shall provide solid waste containers, e.g. dumpsters and roll-off containers at no additional cost to an awarded task order.

3.6.1.2 Solid Wastes: Place solid wastes (excluding clearing debris) in containers which are emptied on a regular schedule. Handling, storage, and disposal must be conducted to prevent contamination. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with solid waste. Separate all recyclables from solid waste content. Non-hazardous solid waste other than flooring materials may be disposed of at one of the MCB Camp Pendleton landfills, e.g. 43 Area or 52 Area. The Contractor shall obtain permits from the landfill approving authority via the FSC Engineering Technician/Construction Representative in order to dispose of solid waste at one of the landfills. All flooring materials must be disposed of and at no additional cost to the Government at an approved recycling facility or disposal facility off MCB Camp Pendleton.

3.6.1.2 Dispose of metal, ferrous and non-ferrous, recyclables at MCB Camp Pendleton's Recycling Center located at Building 22055. The Contractor shall dispose of recyclables that are rejected by the Recycling Center at an approved recycling center at no additional cost to the Government.

3.6.1.3 The Contractor shall develop and maintain a Tracking Record of all solid waste delivered to and disposed of at either one of the MCB Camp Pendleton landfills. Provide a Monthly Report at the end of each month to the FSC Inspection Branch Engineering Technician and to the FSC Technical Writer for the duration of this contract. The Tracking Report shall include the following information:

1. Landfill location
2. Date of disposal
3. Tonnage per vehicle
4. Vehicle license number
5. Name of driver

3.6.2 The Contractor is not authorized to use or dispose of any solid waste, flooring materials or flooring recyclables into any Government owned dumpsters and roll-off containers.

3.6.3 Contractor Generated Chemicals and Chemical Wastes: Dispose of chemicals and chemical waste at an approved facility off of MCB Camp Pendleton and Naval Weapons Station Seal Beach Fallbrook Detachment.

3.6.4 Contractor Generated Hazardous Wastes/Excess Hazardous Materials: Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable Federal and Great State of California regulations. Hazardous materials are defined in 49 CFR 171 - 178. At a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and in accordance with the MCB Camp Pendleton and Naval Weapons Station Seal Beach, Fallbrook Detachment hazardous waste management regulations. Take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. Segregate hazardous waste from other materials and wastes, protect it from the weather by placing it in a safe covered location, and take precautionary measures, such as berming or other appropriate measures against accidental spillage. Storage, packaging, labeling, description of product, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, Federal, Great State of California, and other government environmental agency laws and regulations is the Contractor's responsibility. Transport Contractor generated hazardous waste off Government property within 60 calendar days and in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. Dispose of hazardous waste in compliance with Federal, Great State of California, other states and other government environmental agency laws and regulations. Spills of hazardous or toxic materials must be immediately reported to the MCB Camp Pendleton Fire Department, MCB Camp Pendleton Environmental Security Office and the Contracting Officer. Cleanup and cleanup costs due to Contractor or subcontractor accidental or negligent spills are the Contractor's responsibility. Coordinate the disposition of hazardous waste with the MCB Camp Pendleton Environmental Security Hazardous Waste Branch and the Contracting Officer.

3.6.5 Fuel and Lubricants: Storage of bulk fuel, oil, fluids and lubricants, whether new or used, is not allowed on Government property. Only minor servicing of equipment, e.g. top off of oils, fluids and lubricants is allowed on Government property. Used oil, fluids, lubricants, lubricants and absorbents that are a by-product result of minor service or minor spills shall be disposed of off of Government property at an approved recycle center or disposal.

3.6.6 Disposal of wastewater is as follows:

3.6.6.1 Wastewater from construction activities, such as onsite concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. will not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. Dispose of construction related wastewater by collecting and placing it in a temporary retention pond where suspended material can be settled out and the water can evaporate to separate pollutants from the water. The site for the temporary retention pond must be coordinated with and approved by the Contracting Officer and MCB Camp Pendleton Environmental Security Office.

3.6.6.2 For discharge of ground water, the Contractor will surface discharge in accordance with the requirements of the NPDES or Storm Water Pollution Prevention Plan permit.

3.6.6.3 Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing will be land applied in accordance with MCB Camp Pendleton Environmental Security Office regulations, or it may be discharged into the wastewater collection system upon prior approval from the Wastewater Treatment Department supervisor.

### 3.7 RECYCLING AND WASTE MINIMIZATION

3.7.1 Participate in Great State of California and MCB Camp Pendleton recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of this contract.

### 3.8 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

3.8.1 Existing historical, archaeological, and cultural resources within the Contractor's work area will be shown on contract task order drawings and in the statement of work. Protect these resources and be responsible for their preservation prior to and through completion of construction. If during construction activity unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, suspend work and contact the Contracting Officer immediately for further instruction. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources. Resources covered by this paragraph include, but are not limited to, any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features and any indication of agricultural or other human activities.

### 3.9 BIOLOGICAL RESOURCES

3.9.1 Minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The protection of threatened and endangered animal and plant species, including their habitat, is the Contractor's responsibility. The Contractor shall implement a program, as part of their approved Environmental Protection Plan, to train personnel to identify and protect biological resources when performing work under this contract.

### 3.10 MILITARY MUNITIONS

3.10.1 In the event military munitions, as defined in 40 CFR 260, are discovered or uncovered, the Contractor shall immediately stop work in that area, secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing the munitions, and contact the Contracting Officer immediately.

### 3.12 TRAINING OF CONTRACTOR AND SUBCONTRACTOR PERSONNEL

3.12.1 The Contractor's personnel and subcontractor personnel must be trained in all phases of environmental protection and pollution control. Conduct environmental protection and pollution control meetings for all personnel prior to commencing work on contract task order construction activities. Additional meetings must be conducted for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection and pollution control is implemented. Discuss at the meeting the possibility of encountering anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat which are known to be in the area.

### 3.13 POST CONSTRUCTION CLEANUP

3.13.1 The Contractor shall clean up the construction site and adjacent areas in accordance with Contract Clause: "Cleaning Up".

--End of Section--

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## SECTION 01 62 35

### RECYCLED / RECOVERED MATERIALS

07/06

#### PART 1 GENERAL

##### 1.1 REFERENCES

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

##### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 247

Comprehensive Procurement Guideline for Products Containing Recovered Materials

##### 1.2 OBJECTIVES

1.2.1 Government procurement policy to the Contractor is to acquire, in a cost effective manner, items containing the highest percentage of recycled and recovered materials practicable and consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials. The Environmental Protection Agency (EPA) has designated certain items which must contain a specified percent range of recovered or recycled materials. EPA designated products specified in this contract comply with the stated policy and with the EPA guidelines. The Contractor shall make all reasonable efforts to use recycled and recovered materials in complying with the EPA designated products and otherwise utilizing recycled and recovered materials in the execution of the work under this contract.

1.2.2 The Contractor shall develop and implement a Recyclable Management Program incorporating the recyclables policies of MCB Camp Pendleton into the program.

##### 1.3 EPA DESIGNATED ITEMS INCORPORATED IN THE WORK

1.3.1 Various sections of the specifications contain requirements for materials that have been designated by EPA as being products which are or can be made with recovered or recycled materials. These items, when incorporated into the work under this contract, shall contain at least the specified percentage of recycled or recovered materials unless adequate justification (non-availability) for non-use is provided. When a designated item is specified as an option to a non-designated item, the designated item requirements apply only if the designated item is used in the work.

##### 1.4 EPA PROPOSED ITEMS INCORPORATED IN THE WORK

1.4.1 Products other than those designated by EPA are still being researched and are being considered for future Comprehensive Procurement Guideline (CPG) designation. It is recommended that these items, when incorporated in the work under this contract, contain the highest practicable percentage of recycled or recovered materials, provided specified requirements are also met. Visit <http://www.epa.gov/epawaste/conserve/tools/cpg/index.htm> to view the CPG requirements, products and recovered materials.

##### 1.5 EPA LISTED ITEMS USED IN CONDUCT OF THE WORK, BUT NOT INCORPORATED IN THE WORK

1.5.1 There are many products listed in 40 CFR 247 which have been designated or proposed by EPA to include recycled or recovered materials that may be used by the Contractor in performing the work, but will not be incorporated into the work. These products include office products, temporary traffic control products, and pallets. It is recommended that

these and other non-construction products, when used in the conduct of the work, contain the highest practicable percentage of recycled or recovered materials and that these products be recycled when no longer needed.

## 1.6 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

### SD-01 Preconstruction Submittals

- Recyclable Plan: For Carpet, Carpet Padding, Spent Glue and Chemical Containers, Resilient Flooring, Metals, Glass, Plastic, Cardboard, Paper, Batteries, GA, RO, PO

## 1.7 RECYCLABLE MANAGEMENT PLAN

1.7.1 Submit a Recyclable Management Plan for review and approval of the Contracting Officer within 15-calendar days after award of this contract. The plan shall demonstrate how the contract recyclable diversion goal will be met and shall include the following:

1. Name of individual on the Contractor's staff responsible for recyclable management.
2. Description of the specific approaches to be used in recycling and reuse of the various materials generated, including the on-site temporary storage areas and processing and sorting methods.
3. Name and address of the recycling centers to be used for recyclables that are rejected from the MCB Camp Pendleton Recycle Center.
4. List of the types recyclables that will be salvaged for resale or to be recycled. Recycling facilities, other than MCB Camp Pendleton's Recycle Center, that will be used shall be identified by name, location, and phone number, including a copy of the permit or license for each facility.

1.7.2 Approval of the Contractor's plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting contract cumulative recyclable management requirement.

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

3.1 The Contractor shall dispose of all demolished and new scrap/waste flooring at an approved recycle facility.

-- End of Section --

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## SECTION 01 74 19

### CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT 01/07

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 The Contractor shall manage the production and accumulation of construction and demolition waste as a direct result of the work performed under this contract, to include handling, temporary storage, disposal.

##### 1.2 REFERENCES

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

#### ASTM INTERNATIONAL (ASTM)

ASTM E 1609

(2001) Development and Implementation of a Pollution  
Prevention Program

##### 1.3 GOVERNMENT POLICY

1.3.1 Government policy is to apply sound environmental principles in the implementation of a Construction and Demolition and Waste Management Program. The Contractor shall develop and implement a Construction and Demolition and Waste Management Program in accordance with ASTM E 1609 and in accordance with MCB Camp Pendleton waste management policies. As part of the program, the Contractor shall: (1) practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction and demolition waste from landfills and to facilitate their recycling or reuse.

##### 1.4 MANAGEMENT

1.4.1 The Contractor shall take a pro-active and responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. The Environmental Manager shall be responsible for training personnel, ensuring compliance, and providing documentation as outlined in this contract section. Construction and demolition waste includes products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process, but not incorporated into the work.

##### 1.5 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Preconstruction Submittals

- Waste Management Plan; GA, RO, PO

## 1.6 WASTE MANAGEMENT PLAN

1.6.1 Submit a Waste Management Plan for review and approval of the Contracting Officer within 15-calendar days after award of this contract. The plan shall demonstrate how the contract waste diversion goal will be met and shall include the following:

1. Name of individual on the Contractor's staff responsible for waste management.
2. Actions that will be taken to reduce solid waste generation, including coordination with subcontractors to ensure awareness and participation.
3. Documentation, to include minutes, of the regularly scheduled meetings held that address waste management.
4. Description of the specific approaches to be used to manage waste material, including designated on site temporary storage areas, processing methods, and the process for separating of recyclables and reuse materials from waste.
5. Characterization, including estimated types and quantities, of the waste to be generated.
6. Name and address of the landfill to be used other than MCB Camp Pendleton's landfills.
7. Identification of materials that cannot be recycled and reused with an explanation of why they do not qualify as a recyclable or reuse material.

1.6.2 Approval of Contractor's plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting contract cumulative waste diversion requirement.

## 1.7 RECORDS

1.7.1 Records shall be maintained to document the quantity of waste generated; the quantity of waste diverted through recycling and reuse, and the quantity of waste disposed of at the MCB Camp Pendleton landfill or at an approved landfill off of MCB Camp Pendleton. Quantities may be measured by weight. List each type of waste separately, noting the disposal or diversion date. Identify the landfill, waste processor, or other organization used to process or receive the solid waste. Submit a Monthly Waste Management Report to the FSC Inspection Branch Engineering Technician and the FSC Technical Writer at the end of each month and prior to invoicing. The report shall in accordance with Section 01-57-20.00 10 "Environmental Protection" paragraph 3.5.1.1.

## 1.8 COLLECTION

1.8.1 Separate, store, protect, and handle at the site identified recyclable and salvageable waste products in a manner that maximizes recyclability and salvagability of identified materials. The Contractor shall provide roll-off containers or dumpsters at no additional cost to the Government. Stage the roll-off containers and dumpsters in accordance with the contract task order Environmental Protection Plan. Locate out of the way of construction traffic. Provide adequate space for pick-up and delivery. All containers, to include roll-off's, dumpsters, and trash cans shall have lids. Lids shall be closed or secured when not in use and at the end of the shift. Containers and dumpster staging areas shall be kept neat and clean at all times. Do not allow rubbish, debris, or other materials to be disposed of to accumulate around containers or anywhere on the project site.

1.8.2 Source Separated Method: Waste products and materials that are recyclable shall be separated from trash and sorted as described below into appropriately marked separate containers or containment areas and then transported to a recycle center for further processing. Deliver recyclable materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process. Separate materials into the following category types as appropriate to the project waste and to the available recycling and reuse programs in the project area:

- a. All recyclable flooring materials
- b. Metal flooring components (e.g. steel, iron, galvanized, stainless steel, aluminum, copper, zinc, lead brass, bronze).
  - i. Ferrous.
  - ii. Non-ferrous.
- c. Wood (nails and staples allowed).
- d. Debris.
- e. Glass (colored glass allowed).
- f. Paper.
  - i. Bond.
  - ii. Newsprint.
  - iii. Cardboard and paper packaging materials.
- i. Plastic.
  - i. Type 1: Polyethylene Terephthalate (PET, PETE).
  - ii. Type 2: High Density Polyethylene (HDPE).
  - iii. Type 3: Vinyl (Polyvinyl Chloride or PVC).
  - iv. Type 4: Low Density Polyethylene (LDPE).
  - v. Type 5: Polypropylene (PP).
  - vi. Type 6: Polystyrene (PS).
  - vii. Type 7: Other. Use of this code indicates that the package in question is made with a resin other than the six listed above, or is made of more than one resin listed above, and used in a multi-layer combination.
- j. Gypsum.
- k. Non-hazardous spent containers.
- l. Beverage containers.

1.9.2 Comingled Method: Waste products and recyclable materials shall not be comingled.

## 1.10 DISPOSAL

1.10.1 The Contractor may, upon approval of the Contracting Officer, dispose of non-hazardous construction demolition waste at one of MCB Camp Pendleton's landfills. If approval is not given, dispose of waste at an approved landfill

located off of MCB Camp Pendleton. Waste management shall be in accordance with the approved Waste Management Plan. Except as otherwise specified in other sections of the specifications, disposal shall be in accordance with the following:

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

Not Used.

-- End of Section --



## SECTION 01 78 00

### CLOSEOUT SUBMITTALS

05/09

#### PART 1 GENERAL

##### 1.1 REFERENCES

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

##### ASTM INTERNATIONAL (ASTM)

|             |   |
|-------------|---|
| ASTM E 1971 | (2005) Stewardship for the Cleaning of Commercial and Institutional Buildings |
|-------------|---|

##### GREEN SEAL (GS)

|       |  |
|-------|--|
| GS-37 | (2000; R 2005) Industrial and Institutional Cleaners |
|-------|--|

##### U.S. ARMY CORPS OF ENGINEERS (USACE)

|         |  |
|---------|--|
| TR-06-X | (2006; R 3.0) Architectural, Engineering, and Construction (A/E/C) CADD Standard |
|---------|--|

##### 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-11 Closeout Submittals

- See specific sections in Prescriptive Technical Specifications for warranty information.

##### 1.3 WARRANTY MANAGEMENT

1.3.1 Performance Bond: The Contractor's Performance Bond must remain effective throughout the contract period.

1.3.1.1 In the event the Contractor fails to commence and diligently pursue a workmanship warranty, the Contracting Officer will have the work performed by others, and after completion of the work, will charge the remaining warranty funds of expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.

1.3.1.2 In the event sufficient funds are not available to cover the warranty work performed by the Government at the Contractor's expense, the Contracting Officer will have the right to recoup expenses from the bonding company.

1.3.1.3 For non-emergency or urgent warranty issues, the Contractor shall submit a work schedule that addresses the warranty issues to the Contracting Officer for review and approval within 3-calendar days of notification. Upon approval the Contractor shall be prepared to correct all deficiencies in accordance with the approved scheduled Failure of the Contractor to respond will be cause for the Contracting Officer to proceed against the Contractor.

1.3.2 The Workmanship and Installer's Warranty period will begin on the date that the "Final Acceptance Inspection" has been signed off by the Contracting Officer representative.

1.3.2.1 The Contractor shall copy the warranty to CD and deliver two copies to the FSC Inspection Branch Construction Representative.

1.3.2.2 The Contractor shall deliver the copies of the warranties within 5-calendar days after the "Final Acceptance Inspection" has been completed and signed off on.

#### 1.4 CLEANUP

1.4.1 Provide final cleaning in accordance with ASTM E 1971. Remove waste and surplus materials, rubbish and construction facilities from the site. Recycle, salvage, and return construction and demolition waste from project in accordance with the Recycle Management Plan. Promptly and legally dispose of trash and debris at one of the Base landfills or at an approved landfill off Base. Do not burn, bury, or otherwise dispose of trash on the project site.

### **PART 2 PRODUCTS**

Not Used.

### **PART 3 EXECUTION**

Not Used.

-- End of Section --

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# **PRESCRIPTIVE TECHNICAL SPECIFICATIONS**

## **SECTION 02 41 00**

### **SITE DEMOLITION**

#### **PART 1 GENERAL**

##### **1.1 DESCRIPTION**

1.1.1 The work includes demolition and removal of existing carpeting and padding, various types of flooring, substrates, structural and non-structural subfloor members, wall base, Asbestos Containing Material (ACM) and Lead-Based Paint (LBP). Do not begin demolition until authorization is received from the Contracting Officer. All materials resulting from demolition work, except as indicated otherwise, shall become the property of the Contractor and shall be removed from the MCB Camp Pendleton and Naval Station Seal Beach Fallbrook Detachment. Remove rubbish and demolition material and debris from the project site at the end of each work shift. Stockpiling and accumulation of rubbish, demolition debris, and materials inside or outside of facilities is not allowed and is unacceptable.

1.1.2 The Contractor shall follow San Diego Air Pollution Control District and all other environmental regulations.

##### **1.2 REFERENCES**

#### **AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI)**

ANSI A10.6

Demolition Operations

#### **ENVIRONMENTLA PROTECTION AGENCY CODE OF FEDERAL REGULATIONS (CFR)**

40 CFR 61-SUBPART M

National Emission Standard for Asbestos

##### **1.3 SUBMITTALS**

Government approval is required for submittals with a "GA" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### **SD-01 Pre-Construction Submittals**

- Demolition Plan for substrate, structural and non-structural repairs and replacement, task order specific; GA, RO, PO

##### **1.4 REGULATORY AND SAFETY REQUIREMENTS**

1.4.1 Comply with Federal, the Great State of California, and local government hauling and disposal regulations. In addition to the requirements of the "Contract Clauses," safety requirements shall conform to ANSI A10.6, "Demolition Operations".

1.4.2 Notifications: Furnish timely notification of demolition and renovation projects to Federal, the Great State of California, and local governments in accordance with 40 CFR 61-SUBPART M. Notify the Regional Office of the United

States Environmental Protection Agency (USEPA) (local air pollution control district/agency), and the Contracting Officer in writing 10 days prior to the commencement of work in accordance with 40 CFR 61-SUBPART M.

## 1.5 DUST AND DEBRIS CONTROL

1.5.1 Prevent the spread of dust and debris to occupied portions of the facility, and avoid the creation of a nuisance or hazard to the surrounding facilities and area. Do not use water if it results in hazardous or objectionable conditions, such as, but not limited to, pollution. Sweep surfaces as often as necessary to control the spread of debris.

## 1.6 PROTECTION

1.6.1 Existing Work: The Contractor shall protect the existing floor, wall, and ceiling finishes and surfaces; materials, fixtures, appliances, and equipment that are to remain in place, be reused, or remain the property of the Government. The Contractor shall repair existing finishes and surfaces, fixtures, appliances, and equipment that he/she damaged during the performance of the demolition or during installation operations. Existing finishes and surfaces, fixtures, appliances, and equipment shall be restored to their original condition, or replaced with new, at no cost to the Government. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcements, or structural replacements must have Contracting Officer approval. The Contracting Officer shall approve submitted replacement materials, appliances, fixtures, and equipment prior to installation.

1.6.1.1 Wall Base Removal: Remove the wall base, to include, but not limited to, wood baseboard, vinyl or rubber wall base, and ceramic tile wall base in a way as to not damage the existing wall surface. The Contractor shall be responsible for any repairs or replacements caused due to his negligence while performing demolition or installation work. The Contractor shall be responsible for repairing the damaged wall surface, and texturing and painting the repaired area to match the existing wall surface finish at no cost to the Government.

1.6.1.2 Remove ceramic and quarry tile so as not to cause damage, to include, but not limited to, the following: floor sinks and drains, electrical devices, lighting, cleanouts, plumbing and existing adjacent surfaces. The Contractor shall be responsible for any repairs or replacements caused due to his negligence while performing demolition or installation work at no cost to the Government. The Contracting Officer shall approve submitted replacement materials, fixtures, and equipment prior to installation.

1.6.2 Weather Protection: Protect all materials from the weather elements. The Government shall retain the right to reject materials that are damaged due to damage from the weather elements. The Contractor shall bare the cost of replacement.

1.6.3 Lawns and Landscaping: The Contractor shall not damage lawns and landscaping. The Contractor shall bare all costs to make repairs incurred by them during the performance of work at no cost to the Government.

1.6.4 Traffic Control Signs: Where pedestrian and driver safety is endangered in the area of work, use traffic barricades with flashing lights. Notify the Contracting Officer prior to beginning such work.

## 1.7 RELOCATIONS

1.7.1 Perform the removal, re-installation, and re-positioning of appliances, equipment, fixtures, and other items as specified with workmen skilled in the trades involved. **See ELIN A001AB, B001AB, C001AB, D001AB AND E001AB.**

**1.7.1.1 The Contractor shall remove, relocate and re-position furniture up to 75 pounds in weight to accommodate the installation of flooring. The Contractor is responsible for removing, relocating and re-positioning furniture up to 25 pieces per room. Quantities in excess of 25 pieces per room shall be negotiated using ELINs A011AC, B011AC, C011AC, D011AC AND E011AC.**

1.7.2 The Contractor shall notify the Contracting Officer when damage to furniture, appliances, equipment, fixtures, or other items are observed prior to disconnection, relocation, or removal to remove liability on their part.

1.7.2.1 Should the Contractor notify the Contracting Officer of damage after they relocate or remove any furniture, appliance, equipment, fixtures, or other items, or when all work has been completed, it will be assumed by the Contracting Officer that the Contractor was negligent, and therefore is responsible for the damage that they caused. The Contractor shall bare all costs to repair or replace furniture, appliances, equipment, fixtures, or other items, and to the Contracting Officer's approval.

## 1.8 SITE CONDITIONS

1.8.1 The Contractor shall carefully examine the work site, plans and specifications on a task order. The Contractor is instructed to notify the Contracting Officer of any observed visible damage to surfaces prior to the start of work.

1.8.2 Differing Site Conditions: During the progress of work, if subsurface or latent physical conditions are encountered at the site differing materially from those as specified in a task order, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided in the contract are encountered at the site the party discovering those conditions shall promptly notify the Contracting Officer of the specific conditions before they are disturbed and before work is performed.

## 1.9 EQUIPMENT

1.9.1 The Contractor shall provide adequate and suitable equipment to meet the contract requirements.

## PART 2 PRODUCTS

Not Used.”

## PART 3 EXECUTION

### 3.1 DEMOLITION

3.1.1 Remove only the flooring, baseboard, cove base, and flooring components as specified in a task order. Remove flooring, baseboard, cove base and flooring components in a way that will not damage adjacent interior building components.

3.1.1.1 Repair damaged areas to the condition of the adjacent interior building component. “Damaged areas” is construed to mean areas damaged by the Contractor during demolition. Document the repairs, to include locations, on the Contractor's Daily Production Report.

### 3.2 DISPOSAL OF MATERIAL

3.2.1 Title to Materials: Except where specified in other sections, all materials and equipment removed, and not reused, shall become the property of the Contractor and shall be removed from the MCB Camp Pendleton and Naval Weapons Station Seal Beach Fallbrook Detachment. Title to materials resulting from demolition, and materials and equipment to be removed is vested in the Contractor. The Government will not be responsible for the condition or loss of, or damage to, such property after notice to proceed. Materials and equipment shall not be viewed by prospective purchasers or sold on the site.

3.2.1.1 Haul and dispose of all demolished Portland Concrete Cement (PCC) and shotblast waste to an approved disposal facility off Base. Do not dispose of these types of materials in the landfills located on Base.

3.2.1.2 Disposal of Rubbish and Debris (Trash): Trash may be disposed of at the Las Pulgas Landfill during the hours of operations. Dispose of trash in accordance with the contract specifications.

3.2.1.3 Dispose of hazardous waste off MCB Camp Pendleton and in accordance with Federal, the Great State of California, and local government laws and regulations.

3.2.1.4 Recycle ALL recyclable materials removed by the demolition process.

### 3.3 CLEANUP

3.3.1 The work site shall be cleaned up of all debris daily at the end of the work shift and at the completion of the project.

3.3.2 Debris and Rubbish: Remove and transport debris and rubbish in a manner that will prevent spillage on roads, streets, highways, freeways, pavements, or adjacent areas. Clean up spillage.

-- End of Section --

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## SECTION 02 42 51

### CARPET REMOVAL AND RECLAMATION 05/09

#### PART 1 GENERAL

##### 1.1 REFERENCES

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

#### AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.6 (2006) Safety Requirements for Demolition Operations

#### U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 340/1-90/018 (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance

EPA AP-42 (1995) Compilation of Air Pollution Emission Factors

#### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 247 Comprehensive Procurement Guideline for Products Containing Recovered Materials

40 CFR 61-SUBPART M National Emission Standard for Asbestos

##### 1.2 SUMMARY

Refer to related Section 09 68 00 CARPET for floor preparation prior to installation of new carpet.

##### 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Preconstruction Submittals

- Recycling Center(s), to include company name, address, phone number, email address and website address; GA, RO, PO
- Dust Control Plan: GA, RO, PO
- Packing and Transportation Plan; GA, RO, PO
- Schedule of Carpet Reclamation Activities, task order specific, indicating the following:
  - a. Detailed sequence of removal work; GA, RO, PO

- b. Inventory of items to be removed; GA, RO, PO
- c. Carpet Reclamation Agency records indicating receipt and disposition of used carpet; GA, RO, PO

#### 1.4 QUALITY ASSURANCE

1.4.1 Carpet Reclamation Agency: Submit documentation of being a Carpet America Recovery Efforts (CARE) approved carpet removal contractor (or designated agent firm) providing used carpet recycling under the most current EPA recognized Carpet Reclamation Program, or equivalent from alternate recycling agent.

#### 1.4.2 Carpet Remover Requirements

1. Submit details for the following:
  - a. Proposed dust-control measures
  - b. Proposed packing and transportation measures

1.4.3 Carpet Reclamation Agency Submittal: Submit a copy of Carpet Reclamation Agency records verifying disposition.

#### 1.4.4 Regulatory Requirements

1.4.4.1 Comply with governing regulations; including, but not limited to:

- a. EPA 340/1-90/018
- b. EPA AP-42
- c. 40 CFR 61-SUBPART M
- d. ASSE/SAFE A10.6
- e. 40 CFR 247

1.4.4.2 Comply with hauling and disposal regulations of authorities having jurisdiction. Record and maintain records of all off-site removal of debris and materials.

1.4.4.3 Provide the following documentation to the Contracting Officer at the close-out of each project regarding the removed materials within the Schedule of carpet reclamation activities:

- a. Time and Date of Removal.
- b. Type of Material.
- c. Weight and Quantity of Materials.
- d. Final Destination of Materials.

1.4.44 Carpet Reclamation Agency and Carpet Remover Certification: Certify in writing that used carpet was removed and recycled in accordance with the most current EPA recognized Carpet Reclamation Program. **Do not place removed carpet and associated materials in a landfill.**

## **PART 2 PRODUCTS**

### **2.1 CARPET RECLAMATION AGENCY**

2.1.1 The Contractor must verify that the reclamation agency is an approved Carpet America Recovery Effort (CARE).

### **2.2 CARPET REMOVERS**

2.2.1 Submit documentation of being a CARE approved carpet removal contractor.

### **2.3 MATERIALS**

2.3.1 Adhesive Removal Solvents: Comply with Carpet and Rug Institute Publication 104.

2.3.2 Used Carpet: Maintain possession of removed used carpet. Immediately remove from site and place in container.

2.3.3 Carpet Pad: Provide recycling of carpet padding where locally available or as designated by Carpet Reclamation Agency.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

3.1.1 Verification of Conditions: Examine areas and conditions under which work is to be performed; identify conditions detrimental to proper or timely completion. Do not proceed until unsatisfactory conditions have been corrected.

### **3.2 PREPARATION**

3.2.1 Provide, erect, and maintain barricades, lighting, and guardrails as required to protect general public, workers, and adjoining property.

3.2.2 Vacuum used carpet before removal.

### **3.3 CARPET REMOVAL**

3.3.1 Remove used carpets in large pieces, roll tightly, and pack neatly in container. Include carpet scrap and waste from new installation.

3.3.2 Deposit only clean, dry carpet in containers. "Clean" is defined as free from demolition debris, asbestos contamination, garbage, and tack strips.

3.3.3 Remove adhesive according to recommendations of the Carpet and Rug Institute (CRI).

### **3.4 CONTAINER DISPOSAL**

3.4.1 Place used carpet in fully-enclosed 30-cubic or 40-yard container. Place only used carpeting in collection container. Keep container locked or supervised.

3.4.2 Use effective packing techniques to maximize the amount of material in the container. On average, a container holds 1700-2500 square m/ 2,000-3,000 square yards. Neatly stack carpet tiles or repack in cardboard boxes before placing in container.

3.4.3 When container is full, contact Carpet Reclamation Agency to coordinate pickup and drop-off of replacement container. If container is locked for security purposes, remove lock before pickup.

-- End of Section --

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## SECTION 02 82 16

### ENGINEERING CONTROL OF ASBESTOS CONTAINING MATERIALS

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 Abatement of Asbestos Containing Materials (ACM), to include flooring and mastic impregnated substrate.

1.1.2 Follow all Federal, Great State of California, and San Diego Air Pollution Control District, MCB Camp Pendleton and other local regulations and laws as they pertain ACM abatement procedures.

1.1.2.1 The Contractor shall notify and San Diego Air Pollution Control District before any abatement, complete all necessary forms, and bear the cost of all associated fees.

1.1.2.2 The Contractor shall manifest all ACM through the MCB Camp Pendleton Environmental Security Office.

1.1.2.3 The Contractor shall dispose of all ACM at an approved State or Federal regulated disposal site. The Contractor shall bare all associated packaging and transportation costs, and all associated disposal fees.

##### 1.2 REFERENCES

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

#### AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

|            |  |
|------------|--|
| ANSI Z9.2  | Fundamentals Governing the Design and Operation of Local Exhaust Systems |
| ANSI Z88.2 | Respiratory Protection   |

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

|             |   |
|-------------|---|
| ASTM C 732  | Aging Effects of Artificial Weathering on Latex Sealants                    |
| ASTM D 522  | Mandrel Bend Test of Attached Organic Coatings                              |
| ASTM D 1331 | Surface and Interfacial Tension of Solutions of Surface-Active Agents       |
| ASTM D 2794 | Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact) |
| ASTM E 84   | (1995; Rev. B) Surface Burning Characteristics of Building Materials        |
| ASTM E 96   | Water Vapor Transmission of Materials                                       |
| ASTM E 119  | Fire Tests of Building Construction and Materials                           |

|             |   |
|-------------|---|
| ASTM E 736  | Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members     |
| ASTM E 1368 | Visual Inspection of Asbestos Abatement Projects  |
| ASTM E 1494 | Encapsulants for Spray or Trowel Applied Friable Asbestos-Containing Building Materials |

### **CODE OF FEDERAL REGULATIONS (CFR)**

|                     |  |
|---------------------|--|
| 29 CFR 1926.103     | Respiratory Protection                         |
| 29 CFR 1926.51      | Sanitation                                     |
| 29 CFR 1926.200     | Accident Prevention Signs and Tags             |
| 29 CFR 1926.59      | Hazard Communication                           |
| 29 CFR 1926.1101    | Asbestos, Tremolite, Anthophyllite, Actinolite |
| 40 CFR 61-SUBPART A | General Provisions                             |
| 40 CFR 61-SUBPART M | National Emission Standard for Asbestos        |
| 40 CFR 763          | Asbestos Containing Material in Schools        |

### **ENVIRONMENTAL PROTECTION AGENCY (EPA)**

|                  |   |
|------------------|---|
| EPA 560/5-85-024 | Guidance for Controlling Asbestos Containing Materials in Buildings |
|------------------|---|

### **UNDERWRITERS LABORATORIES INC. (UL)**

|        |   |
|--------|---|
| UL 586 | (1990) High-Efficiency, Particulate, Air Filter Units |
|--------|---|

## **1.3 DEFINITIONS**

1.3.1 ACM: Asbestos Containing Materials.

1.3.2 Amended Water: Water containing a wetting agent or surfactant with a maximum surface tension of 29 dynes per centimeter when tested in accordance with ASTM D 1331.

1.3.3 Area Sampling: Sampling of asbestos fiber concentrations that approximates the concentrations of asbestos in the theoretical breathing zone but is not actually collected in the breathing zone of an employee.

1.3.4 Asbestos: The term asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, and actinolite asbestos and any of these minerals that has been chemically treated or altered. Materials are considered to contain asbestos if the asbestos content of the material is determined to be at least one percent.

1.3.5 Asbestos Control Area: The area where asbestos removal operations are performed that is isolated by physical boundaries that assists in the prevention of the uncontrolled release of asbestos dust, fibers, or debris.

1.3.6 Asbestos Fibers: Those fibers having an aspect ratio of at least 3:1 and longer than 5 micrometers as determined by National Institute for Occupational Safety and Health (NIOSH) Method 7400.

1.3.7 Asbestos Permissible Exposure Limit: 0.1 fibers per cubic centimeter of air as an 8-hour time weighted average measured in the breathing zone as defined by 29 CFR 1926.1101 or other Federal legislation having legal jurisdiction for the protection of workers health.

1.3.8 Background: The ambient airborne asbestos concentration in an uncontaminated area as measured prior to any asbestos hazard abatement efforts. Background concentrations for other (contaminated) areas are measured in similar but asbestos free locations.

1.3.9 Encapsulation: The abatement of an asbestos hazard through the appropriate use of chemical encapsulants.

1.3.10 Encapsulants: Specific materials in various forms used to chemically or physically entrap asbestos fibers in various configurations to prevent these fibers from becoming airborne. There are four types of encapsulants as follows that must comply with performance requirements as specified herein.

1.3.10.1 Removal Encapsulant (can be used as a wetting agent).

1.3.10.2 Bridging Encapsulant (used to provide a tough, durable surface coating to asbestos containing material).

1.3.10.3 Penetrating Encapsulant (used to penetrate the asbestos containing material encapsulating all asbestos fibers and preventing fiber release due to routine mechanical damage).

1.3.10.4 Lock-Down Encapsulant (used to seal off or "lock-down" minute asbestos fibers left on surfaces from which asbestos containing material has been removed).

1.3.11 Friable Asbestos Material: One percent asbestos containing material that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

1.3.12 Glovebag Technique: Those asbestos removal and control techniques put forth in 29 CFR 1926.1101 Attachment G.

1.3.13 HEPA Filter Equipment: High efficiency particulate air (HEPA) filtered vacuum and/or exhaust ventilation equipment with a filter system capable of collecting and retaining asbestos fibers. Filters shall retain 99.97 percent of particles 0.3 microns or larger as indicated in UL 586.

1.3.14 Negative Pressure Enclosure (NPE): That engineering control technique described as a negative pressure enclosure in 29 CFR 1926.1101.

1.3.15 Non-friable Asbestos Material: Material that contains asbestos in which the fibers have been immobilized by a bonding agent, coating, binder, or other material so that the asbestos is well bound and will not normally release asbestos fibers during any appropriate use, handling, storage or transportation. It is understood that asbestos fibers may be released under other conditions such as demolition, removal, or mishap.

1.3.16 Personal Sampling: Air sampling that is performed to determine asbestos fiber concentrations within the breathing zone of a specific employee, as performed in accordance with 29 CFR 1926.1101.

1.3.17 Private Qualified Person (PQP): That qualified person hired by the Contractor to perform the herein listed tasks.

1.3.18 Qualified Person (QP): A Registered Architect, Professional Engineer, Certified Industrial Hygienist, consultant or other qualified person who has successfully completed training and is therefore accredited under a legitimate State of California Model Accreditation Plan as described in 40 CFR 763 as a Building Inspector, Contractor/Supervisor Abatement Worker, and Asbestos Project Designer; and has successfully completed the National Institute of Occupational Safety and Health (NIOSH) 582 course "Sampling and Evaluating Airborne Asbestos Dust" or equivalent. The QP must be qualified to perform visual inspections as indicated in ASTM E 1368. The QP shall be licensed in the State of California.

1.3.19 TEM: Refers to Transmission Electron Microscopy.

1.3.20 Time Weighted Average (TWA): The TWA is an 8-hour time weighted average airborne concentration of asbestos fibers.

1.3.21 Wetting Agent: A chemical added to water to reduce the water's surface tension thereby increasing the water's ability to soak into the material to which it is applied. An equivalent wetting agent must have a surface tension of at most 29 dynes per centimeter when tested in accordance with ASTM D 1331.

## 1.4 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

All task order submittals are due 15-calendar days after award of a task order. Mobilization and work shall not begin until the submittals have been approved by the Contracting Officer.

### SD-01 Pre-Construction Submittals:

- Prior to mobilization submit a task order site specific ACM Abatement Plan for each building or space required to have ACM abatement as indicated on each task order; GA, RO, PO
- Prior to mobilization submit a copy of the San Diego Air Pollution Control District permit that is task order site specific and prior to mobilizing to perform ACM abatement; GA, RO, PO
- Prior to mobilization submit a task order site specific Respiratory Protection Program; GA, RO, PO
- Submit a task order site specific copy of the notification to the Rental Equipment vendor; GA, RO, PO
- Prior to mobilizing submit a copy of the California State Contractor's License for the Contractor performing ACM abatement; GA, RO, PO
- Prior to mobilization submit a copy of the California State Licensed Contractor's Asbestos Certification (ASB); GA, RO, PO
- Asbestos Disposal Quantity Report; GA, RO, PO

### SD-02 Shop Drawings

- Prior to mobilization submit a site specific floor plan for each building or space required to have ACM abatement as indicated on each task order, to include location of decontamination chambers and shower; GA, RO, PO

SD-03 Product Data: As part of the task order site specific ACM abatement Plan submit the following:

- Vacuum Filter; GA, RO, PO
- HEPA Vacuum; GA, RO, PO
- Respirators; GA, RO, PO
- Decontamination Units; GA, RO, PO
- Shower Unit; GA, RO, PO
- Encapsulant; GA, RO, PO
- Wetting Agent; GA, RO, PO

SD-06 Test Reports

- Submit Base Line samples results a day before ACM abatement work starts, task order site specific; GA, RO, PO
- Submit Daily Periodic Personal Air Monitoring Sampling Results, task order site specific; GA, RO, PO
- Daily Direct Work Area Air Monitoring Sampling Results, task order site specific; GA, RO, PO

SD-07 Certificates: Submit current/up to date task order site specific certifications as follows:

- Qualifications of the Competent Person; GA, RO, PO
- Testing Laboratory Qualifications; GA, RO, PO
- Third Party (Industrial Hygienist) Qualifications; GA, RO, PO
- Qualifications of the Asbestos Abatement Worker, Training Certificates; GA, RO, PO
- Medical Examinations for the Asbestos Abatement Worker and Asbestos Abatement Competent Person; GA, RO, PO
- Hazardous Waste Hauler/Transporter; GA, RO, PO
- Hazardous Waste Acceptance Site; GA, RO, PO

SD-08 Manufacture's Instruction

- Encapsulants; GA, RO, PO
- Wetting Agent; GA, RO, PO
- Cleaning/Cutting Chemicals; ; GA, RO, PO”
- Material Safety Data Sheets (MSDS) for all products; GA, RO, PO

SD-11 Closeout Submittal: Submit task order site specific samples as follows:

- Post Abatement Air Clearance TEM Samples; GA, RO, PO
- Copy of Hazardous Waste Manifest; GA, RO, PO

## 1.5 DELIVERY, STORAGE, AND HANDLING

1.5.1 Store ACM waste in approved hazardous waste containers.

1.5.2 Label hazardous waste containers.

1.5.3 Remove hazardous waste containers from MCB Camp Pendleton and Naval Weapons Station Seal Beach Fallbrook Detachment within 5 working days after the completion of all ACM abatements.

1.5.4 Generate the ACM waste manifest through the MCB Camp Pendleton Environmental Security Office located at Building 26049.

## 1.6 QUALITY ASSURANCE

1.6.1 Asbestos Hazard Abatement Plan: Submit a detailed plan of the safety precautions such as lockout, tagout, tryout, fall protection, and confined space entry procedures and equipment and work procedures to be used in the removal and demolition of materials containing asbestos. The plan, not to be combined with other hazard abatement plans, shall be prepared, signed, and sealed by the PQP. Such plan shall include but not be limited to the precise personal protective equipment to be used including, but not limited to, respiratory protection, type of whole-body protection and if reusable coveralls are to be employed decontamination methods (operations and quality control plan), the location of asbestos control areas including clean and dirty areas, buffer zones, showers, storage areas, change rooms, [removal] method, interface of trades involved in the construction, sequencing of asbestos related work, disposal plan, type of wetting agent and asbestos sealer to be used, locations of local exhaust equipment, planned air monitoring strategies, and a detailed description of the method to be employed in order to control environmental pollution. The plan shall also include (both fire and medical emergency) response plans. The Asbestos Hazard Abatement Plan must be approved in writing prior to starting any asbestos work. The Contractor, Asbestos Hazard Control Supervisor, and PQP shall meet with the Contracting Officer prior to beginning work, to discuss in detail the Asbestos Hazard Abatement Plan, including work procedures and safety precautions. Once approved by the Contracting Officer, the plan will be enforced as if an addition to the specification. Any changes required in the specification as a result of the plan shall be identified specifically in the plan to allow for free discussion and approval by the Contracting Officer prior to starting work.

1.6.2 Testing Laboratory: Submit the name, address, and telephone number of each testing laboratory selected for the sampling, analysis, and reporting of airborne concentrations of asbestos fibers along with evidence that each laboratory selected holds the appropriate State of California license, permits and certification that each laboratory is American Industrial Hygiene Association (AIHA) accredited and that persons counting the samples have been judged proficient by current inclusion on the AIHA Asbestos Analysis Registry (AAR) and successful participation of the laboratory in the Proficiency Analytical Testing (PAT) Program. Where analysis to determine asbestos content in bulk materials or transmission electron microscopy is required, submit evidence that the laboratory is accredited by the National Institute of Science and Technology (NIST) under National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos analysis.

1.6.3 Private Qualified Person Documentation: Submit the name, address, and telephone number of the Private Qualified Person (PQP) selected to prepare the Asbestos Hazard Abatement Plan, direct monitoring and training, and documented evidence that the PQP has successfully completed training in and is accredited and where required is certified as, a Building Inspector, Contractor/Supervisor Abatement Worker, and Asbestos Project Designer as described by 40 CFR 763 and has successfully completed the National Institute of Occupational Safety and Health (NIOSH) 582 course "Sampling and Evaluating Airborne Asbestos Dust" or equivalent. [The PQP shall be appropriately licensed in the State of California.

1.6.4 Landfill Approval: Submit documentation that the landfill for disposal is approved for asbestos disposal by the USEPA, State and local regulatory agency(s). Submit to the Contracting Officer, waste shipment records, prepared in accordance with Federal regulations, signed and dated by an agent of the landfill, certifying the amount of asbestos materials delivered to the landfill, within 3-calendar days after delivery. In those States that require a hazardous waste manifest the Contractor shall submit, within 3-calendar days, three signed copies of such to the Contracting Officer.

1.6.5 Employee Training: Submit certificates, prior to the start of work but after the main abatement submittal, signed by each employee indicating that the employee has received training in the proper handling of materials and wastes that contain asbestos in accordance with 40 CFR 763; understands the health implications and risks involved, including the illnesses possible from exposure to airborne asbestos fibers; understands the use and limits of the respiratory equipment to be used; and understands the results of monitoring of airborne quantities of asbestos as related to health and respiratory equipment as indicated in 29 CFR 1926.1101 on an initial and annual basis. Certificates shall be organized by individual worker, not grouped by type of certification. Post appropriate evidence of compliance with the training requirements of 40 CFR 763.

1.6.6 Medical Certification: Submit a certification for each worker and supervisor, signed by a licensed physician indicating that the worker and supervisor has met or exceeded all of the medical prerequisites listed herein and in 29 CFR 1926.1101 and 29 CFR 1926.103 as prescribed by law. Submit certificates prior to the start of work but after the main abatement submittal.

1.6.7 Respiratory Protection Program: Submit a program manual or operating procedure including methods of compliance with regulatory statutes.

1.6.8 Air Sampling Results: Complete fiber counting and provide results to the PQP and NC for review within 16-hours of the "time off" of the sample pump. Notify the Contracting Officer immediately of any airborne levels of asbestos fibers in excess of the acceptable limits. Submit sampling results to the Contracting Officer and the affected Contractor employees where required by law within 3 working days, signed by the testing laboratory employee performing air sampling, the employee that analyzed the sample, and the PQP and NC. Notify the Contractor and the Contracting Officer immediately of any variance in the pressure differential which could cause adjacent unsealed areas to have asbestos fiber concentrations in excess of 0.01 fibers per cubic centimeter or background whichever is higher. In no circumstance shall levels exceed 0.1 fibers per cubic centimeter.

1.6.9 Pressure Differential Recordings for Local Exhaust System: Provide a local exhaust system that creates a negative pressure of at least 0.02 inches of water relative to the pressure external to the enclosure and operate it continuously, 24 hours a day, until the temporary enclosure of the asbestos control area is removed. Submit pressure differential recordings for each work day to the PQP and NC for review and to the Contracting Officer within 24 hours from the end of each work day.

1.6.10 Notifications:

1.6.10.1 Notify the Contracting Officer in writing 10-working days prior to the start of asbestos work as indicated in applicable laws, ordinances, criteria, rules, and regulations.

1.6.10.2 Notify and obtain a permit from the San Diego Air Pollution Control District prior to performing each task order site specific ACM abatement.

1.6.11 Rental Equipment: Submit a copy of the written notification to the rental company concerning the intended use of the equipment and the possibility of asbestos contamination of the equipment.

1.6.12 Respirator Program Records: Submit records of the respirator program as required by ANSI Z88.2, 29 CFR 1926.103, and 29 CFR 1926.1101.

## 1.7 REQUIREMENTS

1.7.1 Perform ACM abatement and ensure all surfaces have been cleaned and certify that the abated surfaces are free from ACM and the air clearance results indicate that the building or space is safe to occupy before removing the critical barriers, decontamination chambers and shower.

1.7.2 Medical Requirements: Provide medical requirements including but not limited to medical surveillance and medical record keeping as listed in 29 CFR 1926.1101.

1.7.3 Medical Examinations: Before exposure to airborne asbestos fibers, provide workers with a comprehensive medical examination as required by 29 CFR 1926.1101 or other pertinent State of California or local directives. This requirement must have been satisfied within the 12-months prior to the start of work on this contract. The same medical examination shall be given on an annual basis to employees engaged in an occupation involving asbestos and within 30-calendar days before or after the termination of employment in such occupation. Specifically identify x-ray films of asbestos workers to the consulting radiologist and mark medical record jackets with the word "ASBESTOS."

1.7.4 Medical Records: Maintain complete and accurate records of employees' medical examinations, medical records, and exposure data for a period of 50-years after termination of employment and make records of the required medical examinations and exposure data available for inspection and copying to: The Assistant Secretary of Labor for Occupational Safety and Health (OSHA), or authorized representatives of them, and an employee's physician upon the request of the employee or former employee.

1.7.5 Training: Train all personnel involved in the asbestos control work in accordance with United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) and State of California training criteria. The Contractor shall document the training by providing: dates of training, training entity, course outline, names of instructors, and qualifications of instructors upon request by the Contracting Officer. Furnish each employee with respirator training and fit testing administered by the PQP as required by 29 CFR 1926.1101. Fully cover engineering and other hazard control techniques and procedures.

1.7.6 Permits, Licenses, and Notifications: Obtain necessary permits and licenses in conjunction with asbestos removal, encapsulation, hauling, and disposition, and furnish notification of such actions required by Federal, State of California, San Diego Air Pollution Control District, other states, and local authorities prior to the start of work. Notify the Regional Office of the United States Environmental Protection Agency (USEPA), Notify the San Diego Air Pollution Control District a minimum of 10- working days prior to commencement of work in accordance with 40 CFR 61-SUBPART M.

1.7.7 Environment, Safety and Health Compliance: In addition to detailed requirements of this specification, comply with those applicable laws, ordinances, criteria, rules, and regulations of Federal, State of California, other states, regional, and local authorities regarding handling, storing, transporting, and disposing of asbestos waste materials. Comply with the applicable requirements of the current issue of 29 CFR 1926.1101, 40 CFR 61-SUBPART A, 40 CFR 61-SUBPART M, and ND\_OPNAVINST 5100.23. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this specification, applicable laws, rules, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirement as defined by the Government shall apply. The following laws, ordinances, criteria, rules and regulations regarding removal, handling, storing, transporting and disposing of asbestos materials apply:

1.7.7.1 California Administrative Code, TITLE 8, ARTICLE 2.5; Registration Asbestos related work.

1.7.7.2 California Code of Regulations, TITLE 8, SECTION 5208; General Safety Orders Asbestos.

### 1.7.7.3 California Business and Professions Code, SECTION 7058.5

1.7.8 Respiratory Protection Program: Establish and implement a respirator program as required by ANSI Z88.2, 29 CFR 1926.1101, and 29 CFR 1926.103. Submit a written description of the program to the Contracting Officer.

1.7.9 Asbestos Hazard Control Supervisor: The Contractor shall be represented on site by a supervisor, trained using the model Contractor accreditation plan as indicated in the Federal statutes for all portions of the herein listed work.

1.7.10 Hazard Communication: Adhere to all parts of 29 CFR 1926.59 and provide the Contracting Officer with a copy of the Material Safety Data Sheets (MSDS) for all materials brought to the site.

## **PART 2 PRODUCTS**

2.1 ENCAPSULANTS: The Contractor shall only use encapsulants that conform to current USEPA requirements and shall not contain any toxic or hazardous substances as defined in 29 CFR 1926.59.

2.2 CUTTING AGENTS: The Contractor shall use cutting agents that are environmentally friendly.

## **PART 3 EXECUTION**

### 3.1 PERSONAL PROTECTIVE EQUIPMENT

3.1.1 Provide the Contracting Officer's representative with at least two complete sets of personal protective equipment as required for entry to and for inspection of the asbestos control area. Provide equivalent training to the Contracting Officer's that has been provided to the Contractor's employees in regards to the use of the required personal protective equipment, with the exception of respirator training. Provide manufacturer's certificate of compliance for all equipment used to contain airborne asbestos fibers.

3.1.2 Respirators: Select respirators for workers performing abatement and other Contractor personnel requiring entry into a contained area where ACM abatement is being performed with respirators that are approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. Do not provide Government personnel with respirators.

3.1.3 Respirators for Handling Asbestos: Provide personnel engaged in pre-cleaning, cleanup, handling, encapsulation removal and or demolition of asbestos materials with respiratory protection as indicated in 29 CFR 1926.1101 and 29 CFR 1926.103.

#### 3.1.4 Exterior Whole Body Protection

3.1.4.1 Outer Protective Clothing: Provide personnel, to include the Contracting Officer's representative, that will be exposed to asbestos with disposable "non-breathable," or reusable "non-breathable" whole body outer protective clothing, head coverings, gloves, and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber gloves for comfort, but shall not be used alone. Make sleeves secure at the wrists, make foot coverings secure at the ankles, and make clothing secure at the neck by the use of tape. Reusable whole body outer protective clothing shall be either disposed of as asbestos contaminated waste upon exiting from the asbestos regulated work area or be properly decontaminated.

3.1.4.2 Work Clothing: Provide cloth work clothes for wear under the outer protective clothing and foot coverings and either dispose of or properly decontaminate them as recommended by the PQP after each use.

3.1.5 Personal Decontamination Unit: Provide a temporary, negative pressure unit with a separate decontamination locker room and clean locker room with a shower that complies with 29 CFR 1926.51(f)(4)(ii) through (V) in between for personnel required to wear whole body protective clothing. Provide two separate lockers for each asbestos worker, one in

each locker room. Keep street clothing and street shoes in the clean locker. HEPA vacuum and remove asbestos contaminated disposable protective clothing while still wearing respirators at the boundary of the asbestos work area and seal in impermeable bags or containers for disposal. HEPA vacuum and remove asbestos contaminated reusable protective clothing while still wearing respirators at the boundary of the asbestos work area, seal in two impermeable bags, label outer bag as asbestos contaminated waste, and transport for decontamination. Do not wear work clothing between home and work. Locate showers between the decontamination locker room and the clean locker room and require that all employees shower before changing into street clothes. Collect used shower water and filter with approved water filtration equipment to remove asbestos contamination. Dispose of filters and residue as asbestos waste. Discharge clean water to the sanitary system. Dispose of asbestos contaminated work clothing as asbestos contaminated waste or properly decontaminate as specified in the Contractor's Asbestos Hazard Abatement Plan. Decontamination units shall be physically attached to the asbestos control area. Build both a personnel decontamination unit and an equipment decontamination unit onto and integral with each asbestos control area.

3.1.6 Decontamination of Reusable Outer Protective Clothing: When reusable outer protective clothing is used, transport the double bagged clothing to a previously notified commercial/industrial decontamination facility for decontamination. Perform non-destructive testing to determine the effectiveness of asbestos decontamination. If representative sampling is used, ensure the statistical validity of the sampling results. If representative sampling is used, reject any entire batch in which any of the pieces exceed 40 fibers per square millimeter. Inspect reusable protective clothing prior to use to ensure that it will provide adequate protection and is not or is not about to become ripped, torn, deteriorated, or damaged, and that it is not visibly contaminated. Notify, in writing, all personnel involved in the decontamination of reusable outer protective clothing as indicated in 29 CFR 1926.1101.

3.1.7 Eye Protection: Provide goggles to personnel engaged in asbestos abatement operations when the use of a full face respirator is not required.

3.1.8 Warning Signs and Labels: Provide warning signs printed in English at all approaches to asbestos control areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos.

3.1.8.1 Warning Sign: Provide vertical format conforming to 29 CFR 1926.200, and 29 CFR 1926.1101 minimum 20 by 14 inches displaying the following legend in the lower panel:

| <u>Legend</u>   | <u>Notation</u>                     |
|---|-------------------------------------|
| Danger  | one inch Sans Serif Gothic or Block |
| Asbestos  | one inch Sans Serif Gothic or Block |
| Cancer and Lung Disease Hazard                                | 1/4 inch Sans Serif Gothic or Block |
| Authorized Personnel Only                                     | 1/4 inch Gothic                     |
| Respirators and Protective Clothing are Required in this Area | 1/4 inch Gothic                     |

Spacing between lines shall be at least equal to the height of the upper of any two lines.

3.1.8.2 Warning Labels: Provide labels conforming to 29 CFR 1926.1101 of sufficient size to be clearly legible, displaying the following legend:

**DANGER**  
**CONTAINS ASBESTOS FIBERS**  
**AVOID CREATING DUST**  
**CANCER AND LUNG DISEASE HAZARD**  
**BREATHING ASBESTOS DUST MAY**  
**CAUSE SERIOUS BODILY HARM**

3.1.9 Local Exhaust System: Provide a local exhaust system in the asbestos control area in accordance with ANSI Z9.2 and 29 CFR 1926.1101 that will provide at least four air changes per hour inside of the negative pressure enclosure. Local exhaust equipment shall be operated 24 hours per day, until the asbestos control area is removed and shall be leak proof to the filter and equipped with HEPA filters. Maintain a minimum pressure differential in the control area of minus 0.02 inch of water column relative to adjacent, unsealed areas. Provide continuous 24-hour per day monitoring of the pressure differential with a pressure differential automatic recording instrument. In no case shall the building ventilation system be used as the local exhaust system for the asbestos control area. Filters on exhaust equipment shall conform to ANSI Z9.2 and UL 586. The local exhaust system shall terminate out of doors and remote from any public access or ventilation system intakes.

3.1.10 Tools: Vacuums shall be leak proof to the filter and equipped with HEPA filters. Filters on vacuums shall conform to ANSI Z9.2 and UL 586. Do not use power tools to remove asbestos containing materials unless the tool is equipped with effective, integral HEPA filtered exhaust ventilation systems. Remove all residual asbestos from reusable tools prior to storage or reuse.

3.2.1 Work Procedure: Perform asbestos related work in accordance with 29 CFR 1926.1101, 40 CFR 61-Subpart M, and as specified herein. Use EPA approved removal procedures and techniques. Personnel shall wear and utilize protective clothing and equipment as specified herein. Eating, smoking, drinking, chewing gum, tobacco, or applying cosmetics shall not be permitted in the asbestos work or control areas. Personnel of other trades not engaged in the removal and demolition of asbestos containing material shall not be exposed at any time to airborne concentrations of asbestos unless all the personnel protection and training provisions of this specification are complied with by the trade personnel. Seal all penetrations prior to commencement of asbestos work. Submit an outage request to FMD and have the building heating, ventilating, and air conditioning system(s) shutdown. Seal off the HVAC supply and return openings to the system(s), prior to the commencement of asbestos work. Disconnect electrical service when wet removal is performed and provide temporary electrical service with verifiable ground fault circuit interrupter (GFCI) protection prior to the use of any water. If an asbestos fiber release or spill occurs outside of the asbestos control area, stop work immediately, notify the Contracting Officer immediately for direction, and correct the condition to the satisfaction of the Contracting Officer including clearance sampling, prior to resumption of work.

3.2.1 Protection of Existing Work to Remain: Perform work without damage or contamination of adjacent work. Where such work is damaged or contaminated as verified by the Contracting Officer using visual inspection or sample analysis, it shall be restored to its original condition or decontaminated by the Contractor at no expense to the Government as deemed appropriate by the Contracting Officer. This includes inadvertent spill of dirt, dust, or debris in which it is reasonable to conclude that asbestos may exist. When these spills occur, stop work immediately. Then clean up the spill. When satisfactory visual inspection and air sampling results are obtained from the PQP work may proceed at the discretion of the Contracting Officer.

3.2.3 Furnishings: Equipment will remain in the building. Cover and seal furnishings with 6-mil plastic sheet or remove from the work area and store in a location on site approved by the Contracting Officer. At the conclusion of the asbestos removal work and cleanup operations, transfer all objects so removed and cleaned back to the area from which they came and re-install them

3.2.4 Pre-cleaning: Wet wipe and HEPA vacuum all surfaces potentially contaminated with asbestos prior to establishment of an enclosure.

### 3.2.5 Asbestos Control Area Requirements

3.2.5.1 Negative Pressure Enclosure: Block and seal openings in areas where the release of airborne asbestos fibers can be expected. Establish an asbestos negative pressure enclosure with the use of curtains, portable partitions, or other enclosures in order to prevent the escape of asbestos fibers from the contaminated asbestos work area. Negative pressure enclosure development shall include protective covering of uncontaminated walls, and ceilings with a continuous membrane of two layers of minimum 6-mil plastic sheet sealed with tape to prevent water or other damage. Provide two layers of 6-mil plastic sheet over floors and extend a minimum of 12 inches up walls. Seal all joints with tape. Provide local exhaust system in the asbestos control area. Openings will be allowed in enclosures of asbestos control areas for personnel and equipment entry and exit, the supply and exhaust of air for the local exhaust system and the removal of properly containerized asbestos containing materials. Replace local exhaust system filters as required to maintain the efficiency of the system.

3.2.5.2 Glovebag: When the construction of a negative pressure enclosure is infeasible for the removal of asbestos. Use alternate techniques as indicated in 29 CFR 1926.1101. Establish designated limits for the asbestos regulated area with the use of rope or other continuous barriers, and maintain all other requirements for asbestos control areas. The PQP shall conduct personal samples of each worker engaged in asbestos handling (removal, disposal, transport and other associated work) throughout the duration of the project. If the quantity of airborne asbestos fibers monitored at the breathing zone of the workers at any time exceeds background or 0.01 fibers per cubic centimeter whichever is greater, stop work, evacuate personnel in adjacent areas or provide personnel with approved protective equipment at the discretion of the Contracting Officer. This sampling may be duplicated by the Government at the discretion of the Contracting Officer. If the air sampling results obtained by the Government differ from those obtained by the Contractor, the Government will determine which results predominate. If adjacent areas are contaminated as determined by the Contracting Officer, clean the contaminated areas, monitor, and visually inspect the area as specified herein.

## 3.3 REMOVAL PROCEDURES

3.3.1 Wet asbestos material with a fine spray of amended water during removal, cutting, or other handling so as to reduce the emission of airborne fibers. Remove material and immediately place in 6 mil plastic disposal bags. Remove asbestos containing material in a gradual manner, with continuous application of the amended water or wetting agent in such a manner that no asbestos material is disturbed prior to being adequately wetted. Where unusual circumstances prohibit the use of 6 mil plastic bags, submit an alternate proposal for containment of asbestos fibers to the Contracting Officer for approval. For example, in the case where both piping and insulation are to be removed, the Contractor may elect to wet the insulation, wrap the pipes and insulation in plastic and remove the pipe by sections. Asbestos containing material shall be containerized while wet. At no time shall asbestos material be allowed to accumulate or become dry. Lower and otherwise handle asbestos containing material as indicated in 40 CFR 61-SUBPART M.

## 3.4 SEALING CONTAMINATED ITEMS DESIGNATED FOR DISPOSAL

3.4.1 Remove contaminated architectural, mechanical, and electrical appurtenances designated for removal by completely coating the items with an asbestos lock-down encapsulant at the demolition site before removing the items from the asbestos control area. These items need not be vacuumed. The asbestos lock-down encapsulant shall be tinted a contrasting color. It shall be spray-applied by airless method. Thoroughness of sealing operation shall be visually gauged by the extent of colored coating on exposed surfaces. Lock-down encapsulants shall comply with the performance requirements specified herein.

### 3.5 AIR SAMPLING

3.5.1 Sampling of airborne concentrations of asbestos fibers shall be performed in accordance with 29 CFR 1926.1101 and as specified herein. Sampling performed in accordance with 29 CFR 1926.1101 shall be performed by the PQP. Unless otherwise specified, use NIOSH Method 7400 for sampling and analysis. Monitoring may be duplicated by the Government at the discretion of the Contracting Officer. If the air sampling results obtained by the Government differ from those results obtained by the Contractor, the Government will determine which results predominate.

### 3.6 SAMPLING PRIOR TO ASBESTOS WORK

3.6.1 Provide area air sampling and establish the baseline one day prior to the masking and sealing operations for each demolition and removal site. Establish the background by performing area sampling in similar but uncontaminated sites in the building.

### 3.7 SAMPLING DURING ASBESTOS WORK

3.7.1 The PQP shall provide personal and area sampling as indicated in 29 CFR 1926.1101 and governing environmental regulations. In addition, provided the same type of work is being performed, provide area sampling at least once every work shift close to the work inside the enclosure, outside the clean room entrance to the enclosure, and at the exhaust opening of the local exhaust system. If sampling outside the enclosure shows airborne levels have exceeded background or 0.01 fibers per cubic centimeter, whichever is greater, stop all work, correct the condition(s) causing the increase, and notify the Contracting Officer immediately. Where alternate methods are used, perform personal and area air sampling at locations and frequencies that will accurately characterize the evolving airborne asbestos levels.

### 3.8 SAMPLING AFTER FINAL CLEAN-UP (CLEARANCE SAMPLING)

3.8.1 Perform area sampling of asbestos fibers using aggressive air sampling techniques as defined in the EPA 560/5-85-024 and establish an airborne asbestos concentration of less than 0.01 fibers per cubic centimeter after final clean-up but before removal of the enclosure or the asbestos work control area. After final cleanup and the asbestos control area is dry but prior to clearance sampling, the PQP and NC shall perform a visual inspection in accordance with ASTM E 1368 to ensure that the asbestos control and work area is free of any accumulations of dirt, dust, or debris. Prepare a written report signed and dated by the PQP documenting that the asbestos control area is free of dust, dirt, and debris and all waste has been removed. Perform Transmission Electron Microscopy (TEM) to analyze clearance samples and report the results in accordance with current NIOSH criteria. Take a minimum of three samples per space for TEM analysis. The asbestos fiber counts from these samples shall be less than 0.01 fibers per cubic centimeter or be not greater than the background, whichever is greater. Should any of the final samples indicate a higher value, the Contractor shall take appropriate actions to re-clean the area and shall repeat the sampling and TEM analysis at no additional cost to the Government.

### 3.9 LOCK-DOWN

3.9.1 Prior to removal of plastic barriers and after pre-clearance clean up of gross contamination, the PQP shall conduct a visual inspection of all areas affected by the removal in accordance with ASTM E 1368. Inspect for any visible fibers, and to ensure that encapsulants were applied evenly and appropriately. A post removal (lock-down) encapsulant shall then be spray applied to ceiling, walls, floors and other areas exposed in the removal area. The exposed area shall include but not be limited to plastic barriers, furnishings and articles to be discarded as well as dirty change room, air locks for bag removal and decontamination chambers.

### 3.10 SITE INSPECTION

3.10.1 While performing asbestos engineering control work, the Contractor shall be subject to on-site inspection by the Contracting Officer who may be assisted by or represented by safety or industrial hygiene personnel. If the work is found to be in violation of this specification, the Contracting Officer or his representative will issue a stop work order to be in effect immediately and until the violation is resolved. All related costs including standby time required to resolve the violation shall be at the Contractor's expense.

## **PART 4 CLEAN-UP AND DISPOSAL**

### **4.1 HOUSEKEEPING**

4.1.1 Essential parts of asbestos dust control are housekeeping and clean-up procedures. Maintain surfaces of the asbestos control area free of accumulations of asbestos fibers. Give meticulous attention to restricting the spread of dust and debris; keep waste from being distributed over the general area. Use HEPA filtered vacuum cleaners. **DO NOT BLOW DOWN THE SPACE WITH COMPRESSED AIR.** When asbestos removal is complete, all asbestos waste is removed from the work-site, and final clean-up is completed, the Contracting Officer will attest that the area is safe before the signs can be removed. After final clean-up and acceptable airborne concentrations are attained but before the HEPA unit is turned off and the enclosure removed, remove all pre-filters on the building HVAC system and provide new pre-filters. Dispose of filters as asbestos contaminated materials. Reestablish HVAC mechanical and electrical systems in proper working order. The Contracting Officer will visually inspect all surfaces within the enclosure for residual material or accumulated dust or debris. The Contractor shall re-clean all areas showing dust or residual materials. If re-cleaning is required, air sample and establish an acceptable asbestos airborne concentration after re-cleaning. The Contracting Officer must agree that the area is safe in writing before unrestricted entry will be permitted. The Government shall have the option to perform monitoring to determine if the areas are safe before entry is permitted.

### **4.2 TITLE TO MATERIALS**

4.2.1 All waste materials, except as specified otherwise, shall become the property of the Contractor and shall be disposed of as specified in accordance with all Federal, State and local regulations and laws.

### **4.3 DISPOSAL OF ASBESTOS**

4.3.1 Procedure for Disposal: Collect asbestos waste, asbestos contaminated water, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing which may produce airborne concentrations of asbestos fibers and place in sealed fiber-proof, waterproof, non-returnable containers (e.g. double plastic bags 6 mils thick, cartons, drums or cans). Wastes within the containers must be adequately wet in accordance with 40 CFR 61-SUBPART M. Affix a warning and Department of Transportation (DOT) label to each container including the bags or use at least 6 mils thick bags with the approved warnings and DOT labeling preprinted on the bag. The name of the waste generator and the location at which the waste was generated shall be clearly indicated on the outside of each container. Prevent contamination of the transport vehicle (especially if the transport vehicle is a rented truck likely to be used in the future for non-asbestos purposes). These precautions include lining the vehicle cargo area with plastic sheeting (similar to work area enclosure) and thorough cleaning of the cargo area after transport and unloading of asbestos debris is complete. Dispose of waste asbestos material at an Environmental Protection Agency (EPA) or State-approved asbestos landfill off Government property. For temporary storage, store sealed impermeable bags in asbestos waste drums or skids. An area for interim storage of asbestos waste-containing drums or skids will be assigned by the Contracting Officer or his authorized representative. Procedure for hauling and disposal shall comply with 40 CFR 61-SUBPART M, State, regional, and local standards. Sealed plastic bags may be dumped from drums into the burial site unless the bags have been broken or damaged. Damaged bags shall remain in the drum and the entire contaminated drum shall be buried. Uncontaminated drums may be recycled. Workers unloading the sealed drums shall wear appropriate respirators and personal protective equipment when handling asbestos materials at the disposal site.

4.3.2 Asbestos Disposal Quantity Report: The PQP shall record and report to the Contracting Officer the amount of asbestos containing material removed and released for disposal for each day of work. Deliver the report, as part of the Contractor's Daily Production Report, by 8:00 a.m. of the following work day. The report shall provide the amounts of material removed during the previous day work in either linear feet or square feet. The report shall provide the amounts of material released during the previous day work in cubic feet. The PQP shall inspect, record and report the amount of asbestos containing material removed and released for disposal on a daily basis.

4.3.3 The Contractor shall provide closeout submittals to the Contracting Officer within three working days of the completion of the lead abatement project.

-- End of Section --

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## SECTION 02 82 33.13.20

### REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 Abatement of Lead-Based Paint (LBP) may be necessary for the application of epoxy flooring on concrete substrates.

1.1.2 Follow all Federal, Great State of California, and San Diego Air Pollution Control District, MCB Camp Pendleton and other local regulations and laws as they pertain ACM abatement procedures.

1.1.2.1 The Contractor shall manifest all LBP through the MCB Camp Pendleton Environmental Security Office.

1.1.2.2 The Contractor shall dispose of all LBP at an approved State or Federal regulated disposal site. The Contractor shall bare all associated packaging and transportation costs, and all associated disposal fees.

##### 1.2 REFERENCES

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

#### AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

|                |  |
|----------------|--|
| ANSI Z9.2-2001 | Fundamentals Governing the Design and Operation of Local Exhaust Systems |
| ANSI Z88.2     | American National Standard for Respiratory Protection                    |

#### OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION (OSHA) CODE OF FEDERAL REGULATIONS (CFR)

|                 |   |
|-----------------|---|
| 29 CFR 1926.21  | Safety Training and Education                     |
| 29 CFR 1926.33  | Access to Employee Exposure and Medical Records   |
| 29 CFR 1926.55  | Gases, Vapors, Fumes, Dusts, and Mists            |
| 29 CFR 1926.59  | Hazard Communications                             |
| 29 CFR 1926.62  | Lead Exposure in Construction                     |
| 29 CFR 1926.65  | Hazardous Waste Operations and Emergency Response |
| 29 CFR 1926.103 | Respiratory Protection                            |
| 40 CFR 260      | Hazardous Waste Management Systems                |

|            |   |
|------------|---|
| 40 CFR 261 | Identification and Listing of Hazardous Waste   |
| 40 CFR 262 | Generators of Hazardous Waste   |
| 40 CFR 263 | Transporters of Hazardous Waste   |
| 40 CFR 264 | Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities                             |
| 40 CFR 265 | Interim Status Standard for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 268 | Land Disposal Restrictions  |
| 40 CFR 745 | Lead Requirements for Lead Based Paint Activities   |
| 49 CFR 172 | Hazardous Materials, Tables, and Hazardous Materials Communication Regulations                                  |
| 49 CFR 178 | Shipping Container Specification  |

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)**

|                |  |
|----------------|--|
| HUD Guidelines | Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing |
|----------------|--|

**UNDERWRITERS LABORATORIES INC. (UL)**

|        |  |
|--------|--|
| UL 586 | High-Efficiency Particulate Air Filter Units |
|--------|--|

**1.3 DEFINITIONS**

1.3.1 Action Level: Employee exposure, without the use of a respirator, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period in an occupational/industrial environment.

1.3.2 Area Sampling: Sampling of lead concentrations within the lead control and inside the physical boundary that is representative of the airborne lead concentrations, but is not collected in the breathing zone of personnel.

1.3.3 Competent Person: As used in this section, refers to a person employed by the contractor who is trained in the recognition and control of lead hazards in accordance with current federal, state, and local regulations. An industrial hygienist or safety professional certified for comprehensive practice by the American Board of Industrial Hygiene or by the Board of Certified Safety professionals is best choice.

1.3.4 Contaminated Room: Room for removal of contaminated personal equipment (PPE).

1.3.5 Decontamination Unit: The decontamination unit consists of three independent chambers connected to each, to include a dirty room, shower room, and a clean room.

1.3.6 Eight-Hour Time Weighted Average (TWA): Airborne concentration of lead to which an employee is exposed, averaged over an 8 hour workday as referenced in the 29 CFR 1926.62.

1.3.7 High Efficiency Particulate Air (HEPA) Vacuum: A HEPA filtered vacuum cleaner with a UL 586 filter system capable of collecting and retaining lead-contaminated dust. A high efficiency particulate filter is defined as a filter that is 99.97 percent efficient against 0.03 micron or larger size particulate.

1.3.8 Lead: A soft heavy toxic malleable metallic element; bluish white when freshly cut but tarnishes readily to dull gray.

1.3.9 Lead-Based Paint (LBP): Paint or other surface coatings that contain lead in excess of 1.0 milligram per centimeter squared or 0.5 percent by weight.

1.3.10 Lead-Based Paint Hazard: Any condition that causes exposure to lead from lead contaminated dust, lead contaminated soil, or lead-based paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects.

1.3.11 Lead-Contaminating Paint (LCP): Lead-based paint or other similar surface coatings containing lead or lead compound in excess of 0.06 percent by weight of the total nonvolatile content of paint.

1.3.12 Lead control Area: An enclosed area or structure constructed as a temporary containment equipped with a HEPA filtered local exhaust which prevents the spread of lead, dust, paint chips, or debris existing as a condition of LBP removal operations. The lead control area is also isolated by physical boundaries to prevent unauthorized entry of personnel.

1.3.13 Lead Permissible Exposure Limit (PEL): Is defined as 50 micrograms per cubic meter of air over an 8-hour time weighted average as specified in 29 CFR 1926.62. If an employee is exposed for more than 8-hours in a workday, the PEL shall be determined by the following formula:  $PEL \text{ (micrograms/cubic meter of air)} = 400/\text{number of hours worked per day}$ .

1.3.14 Personal Sampling: Sampling of airborne lead concentrations within the breathing zone of an employee to determine the 8-hour time weighted average concentration in accordance with 29 CFR 1926.62. Samples shall be considered an area within a hemisphere, forward of the shoulders, with a radius of 6 to 9 inches and centered at the nose or mouth of an employee.

1.3.15 Physical Boundary: An enclosed lead control zone that is cordoned or partitioned off to keep unauthorized personnel from entry. As used in this section, "inside boundary" shall be used synonymous with "outside boundary".

## 1.4 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

All task order submittals are due 15-calendar days after award of a task order. Mobilization and work shall not begin until the submittals have been approved by the Contracting Officer.

### SD-01 Pre-Construction Submittals

- Prior to mobilization submit a task order site specific LBP Abatement Plan for each building or space required to have LBP abatement as indicated on each task order; GA, RO, PO
- Prior to mobilization submit a task order site specific Respiratory Protection Program; GA, RO, PO
- Submit a task order site specific copy of the notification to the Rental Equipment vendor; GA, RO, PO

- Prior to mobilizing submit a copy of the California State Contractor's License for the Contractor performing ACM abatement; GA, RO, PO

#### SD-02 Shop Drawings

- Prior to mobilization submit a site specific floor plan for each building or space required to have LBP abatement as indicated on each task order, to include location of decontamination chambers and shower; GA, RO, PO

#### SD-03 Product Data

- HEPA Vacuum Filter; GA, RO, PO
- HEPA Vacuum; GA, RO, PO
- Respirators; GA, RO, PO
- Decontamination Units; GA, RO, PO
- Shower; GA, RO, PO
- Paint Lock; GA, RO, PO
- Encapsulant; GA, RO, PO

#### SD-06 Test Reports

- Daily Periodic Personal Air Monitoring Sampling Results; GA, RO, PO
- Daily Direct Work Area Air Monitoring Sampling Results; GA, RO, PO

#### SD-07 Certificates: Submit current/up to date task order site specific certifications as follows:

- Qualifications of the Competent Person; GA, RO, PO
- Testing Laboratory Qualifications; GA, RO, PO
- Third Party (Industrial Hygienist) Qualifications; GA, RO, PO
- Qualifications of the Lead Abatement Worker; GA, RO, PO
- Medical Examinations for the Lead Worker and Lead Competent Person; GA, RO, PO
- Hazardous Waste Hauler/Transporter; GA, RO, PO
- Hazardous Waste Acceptance Site; GA, RO, PO

#### SD-08 Manufacture's Instruction

- Encapsulants; GA, RO, PO
- Paint Lock; GA, RO, PO

- Material Safety Data Sheets (MSDS) for all products; GA, RO, PO

#### SD-11 Closeout Submittal

- Final Air Clearances for the Direct Work Area; GA, RO, PO
- Lead-Based Paint Manifest; GA, RO, PO

### 1.5 DELIVERY, STORAGE, AND HANDLING

1.5.1 Store LBP waste in approved hazardous waste containers.

1.5.2 Label hazardous waste containers.

1.5.3 Remove hazardous waste containers from MCB Camp Pendleton within 5-working days after the completion of all LBP abatements.

1.5.4 Generate the LBP waste manifest through the MCB Camp Pendleton Environmental Security Office located at Building 26049.

### 1.6 QUALITY ASSURANCE

1.6.1 Qualifications of the Competent Person: The Contractor is responsible for designating a "Competent Person" at each abatement site. The competent person shall be capable of identifying existing and predictable lead hazards in the surroundings or working conditions. In addition, the Competent Person must have the authorization to take prompt corrective measures to eliminate such problems. The Competent Person shall make daily make inspections of the job site, materials and equipment and ensure the project is in compliance with all Federal and State of California regulations and laws. The Competent Person shall be certified as a Lead Abatement Supervisor through an accredited EPA training provider.

1.6.2 Testing Laboratory: Submit the name, address, and telephone number of the testing laboratory selected to perform sampling, testing, and reporting of airborne concentrations of lead and contaminated lead in soil. Use a laboratory accredited under the EPA National Lead Laboratory Accreditation Program (NLLP) by either American Industrial Association for Laboratory Accreditation (AIALA) or the American Industrial Hygiene Association (AIHA) and that is successfully participating in the Environmental Lead Proficiency Analytical Testing (ELPAT) program to perform sample analysis.

1.6.3 Lead-Based Paint (LBP) Removal Plan: Submit a detailed site-specific plan of the work procedures to be used in the removal of LBP. The plan shall include a drawing showing the typical location, size, and details of lead control areas; the location and details of the decontamination units; view ports, and mechanical ventilation systems. Include in the plan eating and drinking, smoking, and sanitary procedures; interface of trades; sequencing of lead related work; collected waste water and paint disposal plan; air sampling plan; respirators and personal protective equipment (PPE); a detailed description of the method of containment of the operation to ensure that airborne lead concentrations of 30 micrograms per cubic meter of air and baseline lead dust/soil concentrations are not reached outside of the lead control area. Include site preparation and clean-up procedures. Include occupational and environmental sampling, training, and strategy, sampling methodology, frequency, duration of sampling, and qualifications of sampling personnel in the air-sampling portion of the plan.

1.6.4 Occupational and Environmental Sampling Results: Submit occupational and environmental sampling results to the contracting Officer within three working days of collection of LBP, signed by the testing laboratory responsible person, the employee that performed the sampling, and the competent person.

1.6.4.1 The sampling results shall represent each job classification, or if working conditions are similar to previous jobs by the same employer, provide previously collected exposure data that can be used to estimate worker exposures in accordance with 29 CFR 1926.62. The data shall represent the worker's regular daily exposure to lead.

1.6.4.2 Submit worker exposure data conducted during the task based trigger operations of 29 CFR 1926.62.

1.6.4.3 The initial monitoring shall determine the requirements for further monitoring and the need to fully implement the control and protective requirements including the compliance program in accordance with 29 CFR 1926.62.

1.6.5 Occupational and Environmental Assessment Data Report: Some LBP removal work may not require full implementation of the requirements of 29 CFR 1926.62. Based on the experience of the Contractor and/or the use of a specific process or method for performing the work, the Contractor may not be able to provide historic data (previous 12 months) to demonstrate that airborne exposures are controlled below the action level. Such methods or controls shall be fully presented in the LBP. To reduce the full implementation of 29 CFR 1926.62, the Contractor shall submit documentation in an Assessment Data Report.

1.6.5.1 Submit an occupational and environmental assessment report to the Contracting Officer prior to the start of work, signed by the testing laboratory responsible person and the competent person.

1.6.5.2 Submit a report that supports the determination regarding the reduction of the need to fully implement the requirements of 29 CFR 1926.62 and the supporting LBP Plan. The exposure assessment shall represent each job classification, or if working conditions are similar to previous jobs by the same employer, provide previously collected exposure data that can be used to estimate worker exposures in accordance with 29 CFR 1926.62. The data shall represent the worker's regular daily exposure to lead for the stated work.

1.6.5.3 Submit worker exposure data conducted during the task based trigger operations of 29 CFR 1926.62 with a complete process description in supporting the negative assessment.

1.6.5.4 The initial assessment shall determine the requirement for further monitoring and the need to fully implement the control and protective requirements including the compliance program LBP Plan in accordance with 29 CFR 1926.62.

1.6.6 Medical Examinations: Initial medical surveillance as required by 29 CFR 1926.62 shall be made available to all employees exposed to lead at any time (1 Day) above the action level. Full medical surveillance shall be made available to all employees on an annual basis who are or may be exposed to lead in excess of the action level for more than 30-calendar days a year or as required by the 29 CFR 1926.62. Adequate records shall show that employees meet the medical surveillance requirements of 29 CFR 1926.33, 29 CFR 1926.62, and 29 CFR 1926.103.

1.6.7 Medical Records: Maintain complete and accurate medical records of employees for a period of at least 30-years or for the duration of employment plus 30-years, whichever is longer.

1.6.8 Medical Surveillance: Provide medical surveillance to all personnel exposed to lead as indicated in 29 CFR 1926.62.

1.6.9 Competent Person (CP) Responsibilities

1.6.9.2 Reviews and approves the LBP Abatement Plan for conformance to the Federal and State of California regulations and laws.

1.6.9.3 Continuously inspect LBP removal work for conformance with the approved LBP Abatement Plan.

1.6.9.4 Performs air and wipe samples.

1.6.9.5 Ensure work is performed in strict accordance with the contract specifications at all times.

1.6.9.6 Controls work to prevent hazardous exposure to human beings, animals, and to the environment at all times.

1.6.9.7 Certify the conditions of the work as called for elsewhere in this specification.

1.6.10 Training: Each Lead Abatement Worker shall be formally trained in LBP removal/abatement, disposal, and air sampling operations prior to the time of initial job assignment and annually thereafter, in accordance with 29 CFR 1926.21, 29 CFR 1926.62, and Federal EPA and State of California laws and regulations.

1.6.11 Training Certificate: Submit a certificate for each Lead Abatement Worker, signed and dated by an approved EPA accredited training provider stating that the employee has received and passed the required lead training.

1.6.12 Respiratory Protection Program

1.6.12.1 Furnish each employee with a respirator fit test at the time of initial fitting and annually thereafter in accordance with 29 CFR 1926.62.

1.6.12.2 Establish and implement a respiratory protection program as required by ANSI Z88.2, 29 CFR 1926.103, 29 CFR 1926.62, and 29 CFR 1926.55.

1.6.13 Hazardous Waste Management: The Hazardous Waste Management Plan shall comply with applicable requirements of Federal, State of California and other states, and local hazardous waste laws and regulations and address the following:

1.6.13.1 Identification and classification of hazardous wastes associated with the work.

1.6.13.2 Estimated quantities of wastes to be generated and disposed of.

1.6.13.3 Names and qualifications of each Contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and operator and a 24-hour point of contact. Furnish two copies of EPA, State and local hazardous waste permits, manifests, and EPA identification numbers.

1.6.13.4 Names and qualifications (experience and training) of personnel who will be working on site with hazardous wastes.

1.6.13.5 List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.

1.6.13.6 Spill prevention, containment, and clean-up contingency measures including a health and safety plan to be implemented in accordance with 29 CFR 1926.65.

1.6.13.7 Work plan and schedule for waste containment, removal, and disposal. Wastes shall be cleaned up and containerized daily. Container lids shall be secured at all times.

1.6.13.8 Cost for hazardous waste disposal shall be included in the ELIN price that the Contractor places in the Bid Schedule for abatement.

## **PART 2 PRODUCTS**

### **2.1 ENCAPSULANTS**

2.1.1 Encapsulants shall conform to current US EPA requirements, shall contain no toxic or hazardous substances as defined in 29 CFR 1926.59. The encapsulant shall be organic, low odor or odorless, and low VOC. The following requirements shall be met:

2.1.1.1 Certificates of Compliance: The abatement contractor will submit to the Contracting Officer the test results and certificates from the manufacturer substantiating compliance with Performance Requirements for encapsulants when installed according to manufacturer recommendations.

- a. Encapsulant, General:
  - i. ASTM E84: Flame Spread of 25, smoke emission of 50.
  - ii. ASTM C732, Accelerated Aging Test: Life Expectancy - 20 years.
  - iii. ASTM E96: Permeability - Minimum of 0.4 perms.
- b. Bridging and Penetrating Encapsulants:
  - i. ASTM E736: Cohesion/Adhesion Test - 50 lbs/ft.
  - ii. ASTM E119: Fire Resistance - 3 hours (Classified by UL for use over fibrous and cementitious sprayed fireproofing).
  - iii. ASTM D2794, Gardner Impact Test: Impact Resistance - Minimum 43 in/lb.
  - iv. ASTM D522, Mandrel Bend Test: Flexibility - no rupture or cracking.
- c. Lockdown Encapsulants: Note: This specification is not applicable to the requirements of this contract.
  - i. ASTM E119: Fire Resistance - 3 hours (Tested with fireproofing over encapsulant applied directly to steel member).
  - ii. ASTM E736: Bond Strength - 100 lbs/ft (Test compatibility with cementitious and fibrous fireproofing).

2.2 Warning Labels and Signs: Labels and signs shall conform to CFR 1910.1200 and CFR 1926.1101. Signs and labels shall be in English and Spanish. The lettering/wording is as follows:

**WARNING**  
**POISON**  
**LEAD WORK AREA**  
**NO SMOKING OR EATING**

2.3 Solvents: Low odor or Odorless, Low VOC, 100% organic.

### **PART 3 EXECUTION**

#### **3.1 EXAMINATION**

3.1.1 Examine all surfaces before preparing a LBPAP. Notify the Contracting Officer of any concerns that may affect the Lead-Based Paint abatement.

3.1.2 Do not start abatement until all concerns have been addressed and authorization to begin abatement has been given by the Contracting Officer.

#### **3.2 PERSONAL PROTECTIVE EQUIPMENT**

3.2.1 Worker protection measures, including protective clothing, respirators, and other equipment shall be the responsibility of the Contractor. Ensure that each employee has donned and is wearing the PPE correctly and at all times in the regulated area.

3.2.1.1 Provide the Contracting Officer's representative with complete sets of personal protective equipment as required for entry to and to inspect the lead control area. Provide the manufacturer's certificate of compliance for all equipment used to contain airborne lead fibers.

3.2.2 Respirators: Select respirators for Lead Abatement Workers that are approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. Do not furnish respirators to Government personnel.

3.2.2.1 Provide personnel engaged in pre-cleaning, cleanup, handling, encapsulation removal and or demolition of LBP and contaminated materials with respiratory protection as indicated in 29 CFR 1926.1101 and 29 CFR 1926.103.

### 3.2.3 Exterior Whole Body Protection

3.2.3.1 Outer Protective Clothing: Provide personnel exposed to lead with disposable "non-breathable," or reusable "non-breathable" whole body outer protective clothing, head coverings, gloves, and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber gloves for comfort, but shall not be used alone. Make sleeves secure at the wrists, make foot coverings secure at the ankles, and make clothing secure at the neck by the use of tape. Reusable whole body outer protective clothing shall be either disposed of as lead contaminated waste upon exiting from the lead regulated work area or be properly decontaminated.

3.2.3.2 Decontamination of Reusable Outer Protective Clothing: When reusable outer protective clothing is used, transport the double bagged clothing to a previously notified commercial/industrial decontamination facility for decontamination. Inspect reusable protective clothing prior to use to ensure that it will provide adequate protection and is not or is not about to become ripped, torn, deteriorated, or damaged, and that it is not visibly contaminated.

3.2.3.3 Eye Protection: Provide eye protection to personnel engaged in lead abatement operations when the use of a full-face respirator is not required.

### 3.3 PHYSICAL BOUNDARIES (Also known as the Lead Control Zone or Regulated Area)

3.3.1 Determine the Lead Control Zone and install critical barriers, decontamination units, and exhaust ventilation. Provide viewing ports in the critical barriers.

3.3.1.1 The shower room shall be equipped with fresh hot and cold water.

3.3.1.2 Notices and Postings: Provide warning signs printed in English and Spanish at all approaches to lead control areas. Locate signs at a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all lead materials, scrap, waste, debris, and other products contaminated with lead.

3.3.2 Exhaust Ventilation: The Physical Boundary where wet abrasive blasting operations are required shall be designed to optimize the flow of ventilation air past the worker(s), so that the airborne concentration of lead is reduced and the visibility increased. The affected area shall be maintained under negative pressure to reduce the chances that lead dust will contaminate areas outside of the enclosure. The Physical Boundary shall be equipped with dust collection and air-cleaning devices to control emissions of particulate matter to the environment.

3.3.3 Begin LBP abatement only after the Contracting Officer approves the LBPAP.

3.3.3.1 All lead abatement work shall be performed in accordance with the LBPAP and 29 CFR 1926.62, and all applicable Federal, the Great State of California, and local government regulations.

### 3.3.3.2 Lead-Base Paint Removal Methods

- a. Uncontained water blasting and open abrasive blasting are unacceptable methods of abatement.
- b. Wet abrasive blasting with a vacuum arrangement shall be implemented for all LBP abatements. LBP shall be 100 percent removed from the substrate that is being abated as specified.

3.3.4 Responsible Party: The Contractor's independent CIH consultant shall be responsible for the complete industrial hygiene and environmental oversight of all activities involving the removal, encapsulation, and cleanup of lead containing construction material. This includes the oversight duties during planning, air monitoring, site pre-cleaning and preparation, LBP removal and abatement, surface preparation, restoration, painting, and packaging and disposal of both lead containing and non-lead containing construction waste.

3.3.4.1 The CIH firm consultant shall monitor the Contractor or subcontractor for compliance with all applicable Federal, the Great State of California, and local government regulations pertaining to lead-based paint and other lead containing wastes.

3.3.4.2 Final Clearance: The CIH consultant shall conduct a clearance examination and provide appropriate documentation or statements of Lead-Based Paint compliance. The CIH shall provide the minimum amount of final air clearances in accordance with the specified regulations and LBPAP.

3.3.5 Removal of Hazardous Waste from the Lead Control Zone and Cleanup: At the end of each work shift, remove LBP and contaminated waste, and store in hazardous waste containers. The lids of the hazardous waste containers are to remain secured at all times.

3.5.1 Cleanup procedures shall utilize HEPA filtered vacuum systems and/or wet methods, such as mopping, wet wiping, shoveling of debris, etc. No dry sweeping of dust, particulate matter or debris is allowed during any phase of abatement work affecting lead coated surfaces. Clean surfaces shall meet HUD USEPA re-occupancy standard for lead in dust.

### 3.6 DISPOSAL OF HAZARDOUS WASTE

3.6.1 All waste shall be kept drummed, secured, labeled, and stored in a designated secured storage space on site until test results categorize all waste to be hazardous or non-hazardous.

3.6.2 The Contractor shall be responsible for the proper disposal of all non-hazardous and hazardous waste generated by the lead abatement. The hazardous waste shall be removed from the project site within 48-hours after the completion of a LBP abatement.

3.6.3 The lead-based waste media or other debris shall be stored in a manner that will not allow entry of any hazardous material into the environment. Leak-proof drums or portable bins are acceptable. The waste containers shall be kept out of flood plains or areas where run-off may occur. Weather resistant labels using indelible ink that warn of the potential hazards associated with the material shall be placed on the waste containers. The waste containers shall be marked with the contents, tare weights of the containers, and the origin and date of collection of the material. The waste containers shall be keyed to the samples taken.

3.6.4 All waste shall be disposed of in accordance with applicable Federal, State of California, other states, and local government laws and regulations.

## **PART 4 FIELD QUALITY CONTROL**

4.1 The Contractor shall provide an independent CIH on site at all times during abatement. The CIH shall be independent of the Contractor performing lead abatement.

4.2 Provide air monitoring as required by the LBPAP.

4.3 The Project Supervisor shall ensure that the LBPAP procedures are in place and followed by all personnel involved in the abatement process.

4.4. At the completion of the abatement process, the Contractor shall ensure that all LPB is removed and that the regulated area and adjacent areas are free from all LBP hazardous waste.

4.5 The Contractor shall provide closeout submittals to the Contracting Officer within three working days of the completion of the lead abatement project.

-- End of Section --

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## **SECTION 06 10 33**

### **CARPENTRY**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

1.1.1 The work includes removing and installing mill work, making repairs to wood substrates, and making repairs to structural and non-structural subflooring members, to include all required accessories, hardware and components, and all incidental related work.

1.1.1.1 Repair and replacement work will be inclusive of foreseen and unforeseen conditions.

##### **1.2 REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. The latest edition of the publications shall take precedence throughout the life of the contract.

#### **AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)**

|              |                           |
|--------------|---------------------------|
| ANSI A208.1  | Wood Particleboard        |
| ANSI B18.6.1 | Wood Screws (Inch Series) |

#### **AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)**

|         |                                     |
|---------|-------------------------------------|
| AWPA M2 | Inspection of Treated Wood Products |
|---------|-------------------------------------|

#### **NATIONAL WOOD WINDOW & DOOR ASSOCIATION (NWWDA)**

|             |  |
|-------------|--|
| NWWDA I.S.4 | Water-Repellent Preservative Non-Pressure Treatment for Millwork |
|-------------|--|

#### **U.S. DEPARTMENT OF COMMERCE PRODUCT STANDARDS (PS)**

|       |                                     |
|-------|-------------------------------------|
| PS-1  | Construction and Industrial Plywood |
| PS-20 | American Softwood Lumber Standard   |

#### **INTERNATIONAL BUILDING CODE (IBC)**

|     |                                    |
|-----|------------------------------------|
| IBC | (2009) International Building Code |
|-----|------------------------------------|

##### **1.3 SUBMITTALS**

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

All submittals are task order specific. All task order submittals shall be submitted within 15-calendar days after award of a task order. Mobilization and work shall not begin until the submittals have been approved by the Contracting Officer.

#### SD-01 Pre-Construction Submittals

- Prior to start of work submit California State Contractor's License C-5 for the Contractor performing structural and non-structural repairs; GA, RO, PO
- Work Plan and Schedule; GA, RO, PO

#### SD-02 Shop Drawings

- At no additional cost to the Government, submit detailed drawings indicating the proposed repair(s) and replacement of structural and non-structural subfloor members. Include specific design details, type and grade of lumber, fasteners, and hardware; GA, RO, PO

#### SD-03 Product Data

- Submit cutsheets for hardware, to include installation instructions; GA, RO, PO

#### SD-11 Closeout Submittals

- Submit two copies of a repair portfolio on CD with red lined as-built drawings and color photographs of the repair(s) and replacement of structural and nonstructural members; GA, RO, PO

### 1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Deliver lumber, plywood, trim millwork and hardware to the job site in an undamaged condition. Stack materials to ensure ventilation and drainage. Protect against dampness before and after delivery. Store materials under cover in a well-ventilated enclosure and protect against extreme changes in temperature and humidity.

### 1.5 QUALITY ASSURANCE

1.5.1 Lumber: Identify each piece or each bundle of lumber, millwork, and trim by the grade mark of a recognized association or independent inspection agency that is certified by the Board of Review, American Lumber Standards Committee, to grade the species.

1.5.2 Plywood: Each sheet of plywood shall bear the mark of a recognized association or independent inspection agency that maintains continuing control over quality of the plywood. Markings shall identify plywood by species group or span rating, and shall show exposure durability classification, grade, and compliance with PS-1.

1.5.3 Pressure-Treated Lumber and Plywood: Each treated piece shall be inspected in accordance with AWPA M2.

1.5.4 Nonpressure-Treated Woodwork and Millwork: Mark, stamp, or label, indicating compliance with NWWDA I.S.4.

### 1.6 QUALITY CONTROL

1.6.1 Quality Control Manager shall ensure installation of new work, and repairs and replacements are being performed in accordance with the IBC, manufacturer's installation instruction and to industry standards. The QCM shall ensure all work is installed without defects and the completed work is of the highest quality. All completed work shall be level, plumb and true.

## PART 2 PRODUCTS

## 2.1 STRUCTURAL AND NONSTRUCTURAL WOOD MEMBERS

2.1.1 Sizes and Patterns of Wood Products: Yard and board lumber sizes shall conform to PS-20. Provide shaped lumber and millwork in the patterns indicated and standard patterns of the association covering the species. Size references, unless otherwise specified, are nominal sizes, and actual sizes shall be within manufacturing tolerances allowed by the applicable standard.

2.1.2 Plywood, Underlayment: Plywood, Underlayment Grade, Structural 1, Exposure 1, or Exterior C-C (Plugged) Grade, minimum thickness 1/2 inch.

2.1.3 Oriented Strand Board (OSB) Exterior Underlayment: APA A194.1, Exposure 1 Durability Classification, and Structural 1 Classification. Meets the following standards: CSA 0325 Construction Sheathing, CSA 0437 OSB and Waferboard, and Voluntary Product Standard PS 2-92.

### 2.1.4 Moisture Content of Wood Products

2.1.4.1 Interior Finish Lumber, Trim, and Millwork 1 1/4 Inches Nominal or Less in Thickness: 6 percent on 85 percent of the pieces and 8 percent on remainder.

2.1.4.2 Moisture content of other materials shall be 19 percent or less and in accordance with the Uniform Building Code (UBC) applicable standards.

### 2.1.5 Hardware

2.1.5.1 Provide sizes, types, and spacing of manufactured building materials recommended by the product manufacturer except as otherwise indicated or specified. The hardware shall meet the UBC applicable standards.

2.1.5.2 Wood Screws: ANSI B18.6.1.

2.1.5.3 Wire Nails and Staples: FS FF-N-105.

2.1.5.4 Bolts, Nuts, Lag Screws, and Metal Studs: ANSI B18.2.1, ANSI B18.5.2.1M, ANSI/ASME B18.5.2.2M, ASME B18.2.2, and ASTM A 687.

2.1.5.5 Thresholds: ANSI/BHMA A156.21. Use J35100, with vinyl or silicone rubber insert in face of stop, for exterior doors opening out, unless specified otherwise.

### 2.1.6 Quality Standards (QS)

2.1.6.1 Structural and nonstructural lumber shall at minimum be No. 1, Utility and Better (UTIL & BTR) Douglas Fir.

2.1.7 Baseboard: Provide wood finger joint or MDF as called out in a task order.

## **PART 3 EXECUTION**

### 3.1 INTERIOR FINISH WORK

3.1.1 Provide and install baseboard, trim, and millwork sizes, materials, and designs as indicated and as specified. Apply primer to finish work before installing. Joints shall be tight. Miter wood and MDF baseboard, and millwork at exterior angles, and cope at interior angles and at returns. Baseboard, trim, and millwork shall show no visible signs of warp after installation. Install baseboard, millwork and trim in maximum practical lengths. Fasten finish work with finish nails. Provide blind nailing where practicable. Caulk the top of baseboard to eliminate gaps between the wall surface and baseboard.

3.1.1.1 After installation of baseboard, trim and millwork, set face nails, and install putty stopping, sand exposed surfaces smooth, and paint to match existing paint scheme.

3.1.2 Repair drywall and plaster wall surfaces to match the existing adjacent wall surface. Repairs shall include patching, texturing, prime painting, and color coat painting. Upon completion of the repair, no visible signs of the repair should be evident.

3.1.3 Construction Using Structural and Nonstructural Wood Members: All repairs and replacement of members shall be installed to match the existing plane of the adjacent members. All cuts shall be accurate and straight. Members shall be butted up to other members and shall be installed level, plumb, and true. The crown shall be up on structural and nonstructural members. Fastening and securement of members shall be in accordance with the UBC. Installation of wood structural connectors shall be in accordance with the manufacturer's instruction.

3.1.4 Installation of Sheathing: All sheathing shall be installed to match the existing elevation/profile of the adjacent sheathing. Shimming of joists may be required to accomplish matching of the existing elevation/profile of the adjacent sheathing. Cuts shall be straight and accurate. A gap of no more than 1/8" between sheathing edges shall be allowed for contraction and expansion.

3.1.4.1 Set nail heads flush to floor. Sand all joints smooth; avoid over sanding. Fill gouges, chipped areas, and open joints with self leveling underlayment intended for this purpose. Allow filler to dry, then sand underlayment surface smooth.

3.1.5 Thresholds: Thresholds shall meet ADA requirements when a facility is designated for handicapped persons. Cut and notch the threshold accurately and straight to fit in between door jambs. Thresholds shall be securely fastened to the substrate or deck to which they are installed. There shall not be any loose fasteners or fasteners protruding above the threshold surface. Caulk with a paint grade exterior caulk, and make weather tight around the threshold at exterior exit locations.

3.1.5.1 Aluminum thresholds installed on concrete decks shall be imbedded in mortar prior to securing.

3.1.6 Trimming of Wood Doors: Where new flooring installation causes the bottom of a wood door to rub against flooring, perform the following: Remove the wood door and cut the bottom of the door to the required length so that the bottom of the door does not drag when it swings. Cuts shall be straight and accurate. Seal the newly trimmed wood door bottoms. Prime paint and touch up with paint that matches door color. Re-hang the door.

3.1.6.1 Trimming of Metal Doors: Where new flooring installation causes the bottom of a metal door to rub against flooring, remove the door and cut the bottom of door straight and accurate, and to the required length so that the bottom of the door does not drag when it swings.

- a. The bottom channel of the metal door may be required to be removed. This may be accomplished by drilling out the spot welds. After the metal channel is removed, cut the bottom of the metal door to the required length. Install the metal channel after the door has been cut to length by means of tack welding. Grind all welds smooth and apply plastic body filler to fill in the areas of repair that require filling. Sand the body filler smooth to where no visible signs of the repair can be seen. Deburr all cut edges. Prime paint and touch up with paint that matches door color. Re-hang the door.
- b. A wood or metal door shall have a clearance of no more than 1/4" between the flooring and the bottom of the door after it is hung/installed.

3.1.7 Final Cleanup

3.1.7.1 Immediately remove all wet and hardened caulking sealant after wood members and millwork has been installed.

- a. Immediately remove all wet and hardened caulking sealant and mortar after installation of thresholds.

3.1.7.2 Remove all waste lumber and millwork from the job site.

3.1.7.3 Sweep and vacuum all areas where work was performed.

3.1.7.4 Remove all handprints and smudges from all surfaces.

-- End of Section --

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## SECTION 09 65 16.55

### COMMERCIAL LINOLEUM SHEET FLOORING

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 The work includes removing and installing Commercial Linoleum Sheet Flooring. The flooring will be installed over areas subject to heavy concentrated static and dynamic loads. The Contractor shall factor the cost to perform each Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride test into the unit ELIN.

##### 1.2 REFERENCES

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

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

|             |  |
|-------------|--|
| ASTM D 2047 | Standard Test Method for Static Coefficient of Friction of Floor Surfaces.   |
| ASTM D 5116 | Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products. |
| ASTM E 648  | Standard Test Method for Critical Radial Flux of Floor-Wallring Systems Using a Radiant Heat Energy Source               |
| ASTM E 662  | Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials                                  |
| ASTM E 1745 | Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs         |
| ASTM F 710  | Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring                         |
| ASTM F 970  | Standard Test Method for Static Load Limit   |
| ASTM F 1066 | Standard Test Method for Vinyl Composition Floor Tile  |
| ASTM F 1303 | Standard Specification for Sheet Vinyl Floor Wallring with Backing   |
| ASTM F1361  | Standard Specification for Resilient Wall Base   |

|             |  |
|-------------|--|
| ASTM F1516  | Standard Practice for Sealing Seams of Resilient Flooring Products by Heat Weld Method                                 |
| ASTM F 1700 | Standard Specification for Solid Vinyl Floor Tile  |
| ASTM F 1861 | Standard Test Method for   |
| ASTM F 1869 | Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. |
| ASTM F 1913 | Standard Specification for Sheet Vinyl Floor Wallring without Backing  |
| ASTM F 2034 | Standard Specification for Sheet Linoleum Floorwallring.   |
| ASTM G 21   | Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi                                 |

### 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Pre-Construction Submittals

- Contractor/Installer Qualifications: Submit a portfolio with a minimum of two-years of experience installing Commercial Linoleum Sheet Flooring. Include photographs of at least five projects that have been completed over the past five years, to include the client names, current addresses, and current telephone numbers; GA, RO, PO
- Submit a copy of the Contractor's State of California Contractor's License; GA, RO, PO

SD-03 Product Data: Submit manufacturer's product specifications and literature, for each type of Commercial Linoleum Sheet Flooring material and accessories.

- Submit a full range of the manufacturer's standard colors and patterns for selection; GA, RO, PO
- Commercial Linoleum Sheet Flooring; GA, RO, PO
- Commercial Linoleum Sheet Flooring Adhesive, Low VOC; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Wood Floor Primer. Low VOC; GA, RO, PO
- Liquid Floor Stripper. Low VOC; GA, RO, PO

#### SD-04 Samples

- Commercial Linoleum Sheet Flooring. 12” x 12” ; GA, RO, PO

#### SD-06 Test Reports

- Submit test reports (project specific) for Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete, to include a site map, which indicate the Moisture Vapor Emissions rate (MVER) and pH value for each test conducted along with a shop drawing that shows the location of each test conducted; GA, RO, PO

SD-07 Certificates: Signed and dated letter on the manufacturer’s company letterhead by the manufacturer of the product or material attesting that the product and material meets the specification requirements. The document must be dated after award of the contract and clearly name the contract identification.

- Commercial Linoleum Sheet Flooring; GA, RO, PO

SD-08 Manufacturer's Instructions or CRI 104 Installation Instructions: Submit printed installation instructions describing the installation of a product or material, including special notices and Material Safety Data Sheets concerning impedance, hazards, and safety precautions.

- Commercial Linoleum Sheet Flooring, including surface preparation and the recommended application adhesive; GA, RO, PO
- Commercial Linoleum Sheet Flooring Adhesive; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Wood Floor Primer; GA, RO, PO
- Liquid Floor Stripper; GA, RO, PO

SD-11 Closeout Submittals: Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

- Submit printed manufacturer’s maintenance requirements for newly installed Commercial Linoleum Sheet Flooring; GA, RO, PO
- Submit a Workmanship and Installers One-Year Installation Warranty for newly installed Commercial Linoleum Sheet Flooring. The warranty is effective from the date of the “Final Acceptance Inspection”; GA, RO, PO
- Submit the Manufacturer’s 5-Year Warranty. The warranty is effective from the date of the “Final Acceptance Inspection”; GA, RO, PO

## 1.4 ENVIRONMENTAL CONDITIONS

1.4.1 Maintain temperature of spaces in which flooring work is to be performed at no less than 65 degrees F at floor level for 48-hours prior to starting work, during time work is performed, and for 48-hours after work is complete. Maintain minimum temperature of 55 degrees F, thereafter. Or, maintain temperatures in accordance with the manufacturer’s installing instruction, whichever is more stringent. Provide adequate ventilation to remove moisture and fumes from area.

1.4.2 Close spaces to traffic during the Commercial Linoleum Sheet Flooring installation and for the time period after installation in accordance with the manufacturer’s recommendations.

1.4.3 Install flooring and accessories after other finishing operations, including painting, have been completed.

1.4.4 Do not install flooring over new concrete slabs until the concrete has cured for a minimum of 28-calendar days and is sufficiently dry to bond with adhesive.

1.4.5 Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Test in accordance with ASTM F 1869 to determine the moisture vapor emission level prior to application of the flooring system. Fill and finish all drilled or cored holes to the existing finish floor elevation.

1.4.6 The Contractor shall verify that the Commercial Linoleum Sheet Flooring adhesives are compatible with asbestos abatement encapsulants. Only adhesives and encapsulants that are compatible with the approved Commercial Linoleum Sheet Flooring shall be used in this contract.

1.4.7 The Contractor shall correct, at their expense, any uplifting flooring caused from their neglect to ensure proper moisture vapor emissions prior to installation of a flooring system, from failure to use a compatible adhesive with an applied encapsulant, or other factors that are result of the Contractor's negligence.

## 1.5 QUALITY ASSURANCE

1.5.1 Installer Qualifications: The installer shall be an experienced installer with a minimum of two years experience who has specialized in installing Commercial Linoleum Sheet Flooring, types similar to that required by this contract.

1.5.2 Source Responsibility: Obtain each type, color, and pattern of Commercial Linoleum Sheet Flooring specified from one source with resources to provide products of consistent quality in appearance and physical properties without delaying work.

1.5.3 Qualified Materials: Request for material approvals for any other product other than the specified and approved product must be submitted to the Contracting Officer for review, evaluation and approval prior to use, including complete application specifications, physical characteristics, and chemical resistance data. Failure of compliance with this requirement will require complete removal and replacement of the unapproved material at no cost to the Government.

1.5.4 When installing several rolls in one area, the Contractor shall use rolls of the same batch number. The Contractor shall read the sequence numbers and install rolls that are within twenty (20) numbers of each other. The rolls shall be installed in sequential order.

1.5.5 The lines on the back of the Commercial Linoleum Sheet shall represent the trademark edges.

1.5.6 The Contractor shall take into consideration that Commercial Linoleum Sheet Flooring will grow slightly in width and shrink slightly in length of material when placed into wet adhesive. The Contractor shall follow the manufacturer's recommend installation procedures to compensate for this movement.

1.5.7 The Contractor shall not install Commercial Linoleum Sheet Flooring over existing on-grade or below-grade tile.

## **PART 2 PRODUCTS**

### 2.1 FLOOR MATERIALS

2.1.1 Conform to the respective specifications and standards and to the requirements specified herein.

### 2.2 COMMERCIAL LINOLEUM SHEET FLOORING

2.2.1 In accordance with ASTM F 2034 Type I; ASTM F 970, ASTM E 648, and ASTM E 662. Provide in 6'-7" widths; Static Load Limit: 450 psi; Minimum Thickness: 0.125; Patterns/Color: Shall be a wide range of the single source manufacturer's neutrals, tinted neutrals and colors.

## 2.3 FLOORING PREPARATION PRODUCTS

2.3.1 Embossing Leveler: For use to level and patch on resilient flooring. Type as recommended by the flooring manufacturer.

2.3.2 Underlayment Leveler: For use on wood and on concrete for leveling and patching. Type as recommended by the flooring manufacturer.

2.3.3 Cleaning Solvents: Low toxicity and flash point in excess of 10 degrees. Low VOC.

2.3.4 Wood Floor Primer: Type as recommended by the flooring manufacturer. Low VOC.

2.3.5 Liquid Floor Stripper: Type as recommended by the flooring manufacturer. Low VOC. For use when applying new flooring over existing resilient flooring.

## 2.4 ADHESIVES

2.4.1 Floor adhesive compatible with the Commercial Linoleum Sheet Flooring and floor surface. Type as recommended by the manufacturer. Water resistant, low VOC (not to exceed 10 milligrams per square meter per hour), non-staining type and complies with the flame spread rating required for the carpet installation.

## 2.5 ACCESSORIES

2.5.1 Refer to contract Section 09 65 19.70, "VINYL COMPOSITION TILE AND WALL BASE" for specifications and requirements for wall base, edge strips, stair tread, and nosings. Refer to contract Section 16 10 33 "CARPENTRY" for specifications and requirements for thresholds.

## **PART 3 EXECUTION**

### 3.1 EXAMINATION

3.1.1 The Contractor shall examine substrates, with the installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.

3.1.1.1 Verify that finishes of substrates comply with tolerances and other requirements specified in other contract sections and that substrates are free of cracks, ridges, depressions, and scale that might interfere with adhesion of resilient products.

3.1.1.2 Verify that floor and wall surfaces to receive flooring and wall base are free of substances which may adversely affect the adhesive and resilient materials.

3.1.1.3 Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION OF SURFACES

3.2.1 Prepare substrates according to the manufacturer's written recommendations to ensure adhesion of resilient products.

3.2.2 Concrete Substrates: Prepare according to ASTM F 710.

3.2.2.1 Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Tests in accordance with ASTM E 1907 to determine the suitability of the concrete substrate that is to receive resilient flooring. Proceed with installation only after the substrate passes the Anhydrous Calcium Chloride Moisture Vapor Transmission Tests.

3.2.2.2 Perform Alkalinity and Adhesion Tests as recommended by the manufacturer. Proceed with installation only after the substrate passes the Anhydrous Calcium Chloride Moisture Vapor Transmission Tests.

3.2.2.3 Verify that new concrete substrates are free of curing compounds, sealers, release agents, and hardeners.

3.2.2.4 Comply with ASTM F 710.

- a. Remove ridges, bumps, trowel marks, and protrusions from the substrate.
- b. Clean and remove paint, dirt, oil, grease, sealers, residual adhesives, and harmful substances which could impair performance of adhesives used with the resilient product.
- c. Fill depressions, low spots, cracks, joints, holes, indentations, and other defects with self-leveling underlayments. Self-leveling underlayments shall be applied/installed in accordance with the manufacturer's instructions. Trowel to a smooth flat surface producing a substrate to within a tolerance of 1/16" in 10 feet.
- d. Set nail heads flush to floor. Sand all joints smooth; avoid over sanding. Fill gouges, chipped areas, and open joints with self-leveling underlayment intended for this purpose. Leave joints slightly open to allow for expansion. Allow filler to dry, then sand underlayment surface smooth.
- e. In renovation or remodel work, remove all existing adhesive residue so that 100 percent of the overall area of the original substrate is exposed.
- f. Vacuum clean all surfaces to receive flooring.
- g. Prime substrate in accordance with the flooring and primer manufacturer's recommendations.

### 3.3 APPLIANCES AND FIXTURES

3.3.1 Remove and reinstall appliances, to include drinking fountains and water coolers, as specified herein. Appliances shall be reinstalled in accordance with manufacturer's installation instructions and to Code.

3.3.2 Remove and replace water closets. Install new wax rings, toilet flange, securing hardware, and trim. Caulk completely around the water closet with tub and tile caulk.

### 3.4 APPLICATION

3.4.1 To avoid damage, install flooring after other tradesmen in same area have completed their work. Apply flooring and accessories in accordance with manufacturer's installation instructions, using workmen experienced in application of such flooring. Detailed requirements:

3.4.1.1 Unroll Commercial Linoleum Sheet Flooring and lay flat to allow curl to relax before layout and cutting. Layout Commercial Linoleum Sheet Flooring to produce the minimum amount of seams.

3.4.1.2 Dry install Commercial Linoleum Sheet Flooring to ensure proper lengths and widths have been cut.

3.4.1.3 Adhesives: Apply in accordance with adhesive manufacturer's printed directions. Do not allow smoking, open flames, or other sources of ignition in area where solvent-containing adhesives are being used or spread.

3.4.1.4 Roll Commercial Linoleum Sheet Flooring in place, and press with a heavy roller to attain full adhesion.

3.4.1.5 Ensure that installed Commercial Linoleum Sheet Flooring is installed in accordance as specified. Edges patterns shall be accurately aligned. Misalignment is unacceptable and the Contractor will be required to remove and replace the installed Commercial Linoleum Sheet Flooring at their expense.

3.4.1.6 As specified, install base flashed-cove method. Install trim cap at the top of the exposed edge of the cove. Install radius backing at the base of the wall and floor juncture to self cove base. Seal seams with the manufacturer's recommended sealant or weld rod.

3.4.1.7 Terminate Commercial Linoleum Sheet Flooring at the centerline of door openings where adjacent floor is dissimilar.

3.4.1.8 Install edge strips and thresholds at all unprotected or exposed edges and where Commercial Linoleum Sheet Flooring terminates.

3.4.1.9 Scribe Commercial Linoleum Sheet Flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4.1.10 Seams shall be heat welded. Wait a minimum of 10-hours after installation before heat welding or as per the Commercial Linoleum Sheet Flooring manufacturer's installation instructions.

### 3.5 CLEANING AND FINISHING

3.5.1 Follow flooring manufacturer's recommendations to remove surplus adhesive. Do not use materials and methods that may damage the Commercial Linoleum Sheet Flooring.

3.5.2 Vacuum/sweep flooring and adjacent surfaces thoroughly.

3.5.3 Scuffed, scratched, and discolored Commercial Linoleum Sheet Flooring is unacceptable.

3.5.4 Damp mop the new flooring, but do not damp mop until after the time period recommended by the floor covering manufacturer.

#### 3.5.5 Protection

3.5.5.1 Prohibit traffic on floor finish for a minimum of 48 hours after installation.

3.5.5.2 Do not move heavy and sharp objects directly in contact with the new floor surface.

3.5.5.3 Cover and protect work from damage from subsequent construction operations so there will be no indication of use or damage at the time of acceptance.

3.5.5.4 Maintain temperature and humidity levels in accordance with the manufacturer's instructions.

3.5.5.5 Protect flooring and stair treads from traffic for 48-hours after installation to allow set of adhesive. From time of laying until acceptance, protect floor and stair treads from damage. Remove and replace defects that develop, such as damaged, loose, broken, or curled tiles.

### 3.6 WARRANTY

#### 3.6.1 Task order specific.

3.6.1.1 Submit a One-Year Workmanship and Installer's Warranty within 5-calendar days after the "Final Acceptance Inspection" has been signed off by the Contracting Officer's representative.

3.6.1.2 Warranties shall cover all labor and materials, including labor and installation costs involved to replace defective product or workmanship.

-- End of Section --



## SECTION 09 65 16.80

### COMMERCIAL SHEET VINYL FLOORING

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 The work includes removing and installing Commercial Sheet Vinyl Flooring. The flooring will be installed over areas subject to heavy concentrated static and dynamic loads. The Contractor shall factor the cost to perform each Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride test into the unit ELIN.

##### 1.2 REFERENCES

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

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

|             |  |
|-------------|--|
| ASTM D 2047 | Standard Test Method for Static Coefficient of Friction of Floor Surfaces.   |
| ASTM D 5116 | Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products. |
| ASTM E 648  | Standard Test Method for Critical Radial Flux of Floor-Wallring Systems Using a Radiant Heat Energy Source               |
| ASTM E 662  | Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials                                  |
| ASTM E 1745 | Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs         |
| ASTM F 710  | Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring                         |
| ASTM F 970  | Standard Test Method for Static Load Limit   |
| ASTM F 1066 | Standard Test Method for Vinyl Composition Floor Tile  |
| ASTM F 1303 | Standard Specification for Sheet Vinyl Floor Wallring with Backing   |
| ASTM F1361  | Standard Specification for Resilient Wall Base   |

|             |  |
|-------------|--|
| ASTM F1516  | Standard Practice for Sealing Seams of Resilient Flooring Products by Heat Weld Method                                 |
| ASTM F 1700 | Standard Specification for Solid Vinyl Floor Tile  |
| ASTM F 1861 | Standard Test Method for   |
| ASTM F 1869 | Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. |
| ASTM F 1913 | Standard Specification for Sheet Vinyl Floor Wallring without Backing  |
| ASTM F 2034 | Standard Specification for Sheet Linoleum Floor Wallring.  |
| ASTM G 21   | Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi                                 |

### 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Pre-Construction Submittals

- Contractor/Installer Qualifications: Submit a portfolio with a minimum of two-years of experience installing Commercial Sheet Vinyl Flooring. Include photographs of at least five projects that have been completed over the past five years, to include the client names, current addresses, and current telephone numbers; GA, RO, PO
- Submit a copy of the Contractor's State of California Contractor's License; GA, RO, PO

SD-03 Product Data: Submit manufacturer's product specifications and literature, for each type of Commercial Linoleum Sheet Flooring material and accessories.

- Commercial Sheet Vinyl Flooring; GA, RO, PO
- Commercial Sheet Vinyl Flooring Adhesive, Low VOC; GA, RO, PO
- Commercial Sheet Vinyl Welding Rod; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Wood Floor Primer. Low VOC; GA, RO, PO
- Liquid Floor Stripper. Low VOC; GA, RO, PO

#### SD-04 Samples

- Commercial Sheet Vinyl Flooring. 12” x 12” ; GA, RO, PO
- Welding Rod, MFG colors; GA, RO, PO

#### SD-06 Test Reports

Submit test reports (project specific) for Standard Test Method for Measuring Anhydrous Calcium Chloride Moisture Vapor Emission Rate of Concrete, to include a site map, which indicate the Moisture Vapor Emissions Rate (MVER) and pH value for each test conducted along with a shop drawing that shows the location of each test conducted; GA, RO, PO

SD-07 Certificates: Signed and dated letter on the manufacturer’s company letterhead by the manufacturer of the product or material attesting that the product and material meets the specification requirements. The document must be dated after award of the contract and clearly name the contract identification.

- Commercial Sheet Vinyl Flooring; GA, RO, PO

SD-08 Manufacturer's Instructions or CRI 104 Installation Instructions: Submit printed installation instructions describing the installation of a product or material, including special notices and Material Safety Data Sheets concerning impedance, hazards, and safety precautions.

- Commercial Sheet Vinyl Flooring, including surface preparation and the recommended application adhesive; GA, RO, PO
- Commercial Sheet Vinyl Flooring Adhesive; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Wood Floor Primer; GA, RO, PO
- Liquid Floor Stripper; GA, RO, PO
- Commercial Sheet Vinyl Welding Rod; GA, RO, PO

SD-11 Closeout Submittals: Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

- Submit printed manufacturer’s maintenance requirements for newly installed Commercial Sheet Vinyl Flooring; GA, RO, PO
- Submit a Workmanship and Installers One-Year Installation Warranty for newly installed Commercial Sheet Vinyl Flooring. The warranty is effective from the date of the “Final Acceptance Inspection”; GA, RO, PO
- Submit the Manufacturer’s 5-Year Warranty. The warranty is effective from the date of the “Final Acceptance Inspection”; GA, RO, PO

## 1.4 ENVIRONMENTAL CONDITIONS

1.4.1 Maintain temperature of spaces in which flooring work is to be performed at no less than 65 degrees F at floor level for 48-hours prior to starting work, during time work is performed, and for 48-hours after work is complete. Maintain

minimum temperature of 55 degrees F, thereafter. Or, maintain temperatures in accordance with the manufacturer's installing instruction, whichever is more stringent. Provide adequate ventilation to remove moisture and fumes from area.

1.4.2 Close spaces to traffic during the Commercial Sheet Vinyl Flooring installation and for the time period after installation in accordance with the manufacturer's recommendations.

1.4.3 Install flooring and accessories after other finishing operations, including painting, have been completed.

1.4.4 Do not install flooring over new concrete slabs until the concrete has cured for a minimum of 28-calendar days and is sufficiently dry to bond with adhesive.

1.5.4.1 Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Test in accordance with ASTM F 1869 to determine the moisture vapor emission level prior to application of the flooring system. Fill and finish all drilled or cored holes to the existing finish floor elevation.

1.5.5 The Contractor shall verify that the Commercial Sheet Vinyl Flooring adhesives are compatible with asbestos abatement encapsulants. Only compatible adhesives and encapsulants shall be used in this contract.

1.4.6 The Contractor shall correct, at their expense, any uplifting flooring caused from their neglect to ensure proper moisture vapor emissions prior to installation of a flooring system, from failure to use a compatible adhesive with an applied encapsulant, or other factors that are result of the Contractor's negligence.

## 1.5 QUALITY ASSURANCE

1.5.1 Installer Qualifications: The installer shall be an experienced installer with a minimum of two years experience who has specialized in installing Commercial Sheet Vinyl Flooring, types similar to that required by this contract.

1.5.2 Source Responsibility: Obtain each type, color, and pattern of Commercial Sheet Vinyl Flooring specified from one source with resources to provide products of consistent quality in appearance and physical properties without delaying work.

1.5.3 Qualified Materials: Request for material approvals for any other product other than the specified and approved product must be submitted to the Contracting Officer for review, evaluation and approval prior to use, including complete application specifications, physical characteristics, and chemical resistance data. Failure of compliance with this requirement will require complete removal and replacement of the unapproved material at no cost to the Government.

1.5.4 When installing several rolls in one area, the Contractor shall use rolls of the same batch number. The Contractor shall read the sequence numbers and install rolls that are within twenty (20) numbers of each other. The rolls shall be installed in sequential order.

1.5.5 The lines on the back of the Commercial Linoleum Sheet shall represent the trademark edges.

1.5.6 The Contractor shall take into consideration that Commercial Sheet Vinyl Flooring will grow slightly in width and shrink slightly in length of material when placed into wet adhesive. The Contractor shall follow the manufacturer's recommend installation procedures to compensate for this movement.

1.5.7 The Contractor shall not install Commercial Sheet Vinyl Flooring over existing on-grade or below-grade tile.

## **PART 2 PRODUCTS**

### 2.1 FLOOR MATERIALS

2.1.1 Conform to the respective specifications and standards and to the requirements specified herein.

## 2.2 COMMERCIAL SHEET VINYL FLOORING

2.2.1 In accordance with ASTM F 1303 Type I, Grade I, Class B backing; ASTM F 970, ASTM E 648, and ASTM E 662. Provide in 6'-0" widths; Static Load Limit: 750 psi; Minimum Thickness: 0.080; Patterns/Color: Shall be a wide range of the single source manufacturer's neutrals, tinted neutrals and colors.

2.2.1.1 Welding Rod: Shall be an inlaid sheet solid color weld rod; color coordinated with the Commercial Sheet Vinyl. Weld rod used shall be from the single source manufacturer of the Commercial Sheet Vinyl flooring.

## 2.3 FLOORING PREPARATION PRODUCTS

2.3.1 Embossing Leveler: For use to level and patch on resilient flooring. Type as recommended by the flooring manufacturer.

2.3.2 Underlayment Leveler: For use on wood and on concrete for leveling and patching. Type as recommended by the flooring manufacturer.

2.3.3 Cleaning Solvents: Low toxicity and flash point in excess of 10 degrees. Low VOC.

2.3.4 Wood Floor Primer: Type as recommended by the flooring manufacturer. Low VOC.

2.3.5 Liquid Floor Stripper: Type as recommended by the flooring manufacturer. Low VOC. For use when applying new flooring over existing resilient flooring.

## 2.4 ADHESIVES

2.4.1 Floor adhesive compatible with the Commercial Sheet Vinyl Flooring and floor surface. Type as recommended by the manufacturer. Water resistant, low VOC (not to exceed 10 milligrams per square meter per hour), non-staining type and complies with the flame spread rating required for the carpet installation.

## 2.5 ACCESSORIES

2.5.1 Refer to contract Section 06 65 19.70, "VINYL COMPOSITION TILE AND WALL BASE" for specifications and requirements for wall base, edge strips, stair tread, and nosings. Refer to contract Section 16 10 33, "CARPENTRY" for specifications and requirements for thresholds.

## **PART 3 EXECUTION**

### 3.1 EXAMINATION

3.1.1 The Contractor shall examine substrates, with the installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.

3.1.1.1 Verify that finishes of substrates comply with tolerances and other requirements specified in other contract sections and that substrates are free of cracks, ridges, depressions, and scale that might interfere with adhesion of resilient products.

3.1.1.2 Verify that floor and wall surfaces to receive flooring and wall base are free of substances which may adversely affect the adhesive and resilient materials.

3.1.1.3 Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION OF SURFACES

3.2.1 Prepare substrates according to the manufacturer's written recommendations to ensure adhesion of resilient products.

3.2.2 Concrete Substrates: Prepare according to ASTM F 710.

3.2.2.1 Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Tests in accordance with ASTM E 1907 to determine the suitability of the concrete substrate that is to receive resilient flooring. Proceed with installation only after the substrate passes the Anhydrous Calcium Chloride Moisture Vapor Transmission Tests

3.2.2.2 Perform Alkalinity and Adhesion Tests as recommended by the manufacturer. Proceed with installation only after the substrate passes the Anhydrous Calcium Chloride Moisture Vapor Transmission Tests.

3.2.2.3 Verify that new concrete substrates are free of curing compounds, sealers, release agents, and hardeners.

3.2.2.4 Comply with ASTM F 710.

- a. Remove ridges, bumps, trowel marks, and protrusions from the substrate.
- b. Clean and remove paint, dirt, oil, grease, sealers, residual adhesives, and harmful substances which could impair performance of adhesives used with the resilient product.
- c. Fill depressions, low spots, cracks, joints, holes, indentations, and other defects with self-leveling underlayments. Self-leveling underlayments shall be applied/installed in accordance with the manufacturer's instructions. Trowel to a smooth flat surface producing a substrate to within a tolerance of 1/16" in 10 feet.
- d. Set nail heads flush to floor. Sand all joints smooth; avoid over sanding. Fill gouges, chipped areas, and open joints with self-leveling underlayment intended for this purpose. Leave joints slightly open to allow for expansion. Allow filler to dry, then sand underlayment surface smooth.
- e. In renovation or remodel work, remove all existing adhesive residue so that 100 percent of the overall area of the original substrate is exposed.
- f. Vacuum clean all surfaces to receive flooring.
- g. Prime substrate in accordance with the flooring and primer manufacturer's recommendations.

### 3.3 APPLIANCES AND FIXTURES

3.3.1 Remove and reinstall appliances, to include drinking fountains and water coolers, as specified herein. Appliances shall be reinstalled in accordance with manufacturer's installation instructions and to Code.

3.3.2 Remove and replace water closets. Install new wax rings, toilet flange, securing hardware, and trim. Caulk completely around the water closet with tub and tile caulk.

### 3.4 APPLICATION

3.4.1 To avoid damage, install flooring after other tradesmen in same area have completed their work. Apply flooring and accessories in accordance with manufacturer's installation instructions, using workmen experienced in application of such flooring. Detailed requirements:

3.4.1.1 Unroll Commercial Sheet Vinyl Flooring and lay flat to allow curl to relax before layout and cutting. Layout Commercial Sheet Vinyl Flooring to produce the minimum amount of seams.

3.4.1.2 Dry install Commercial Sheet Vinyl Flooring to ensure proper lengths and widths have been cut.

3.4.1.3 Adhesives: Apply in accordance with adhesive manufacturer's printed directions. Do not allow smoking, open flames, or other sources of ignition in area where solvent-containing adhesives are being used or spread.

3.4.1.4 Roll Commercial Sheet Vinyl Flooring in place, and press with a heavy roller to attain full adhesion.

3.4.1.5 Ensure that installed Commercial Sheet Vinyl Flooring is installed in accordance as specified. Edges patterns shall be accurately aligned. Misalignment is unacceptable and the Contractor will be required to remove and replace the installed Commercial Sheet Vinyl Flooring at their expense.

3.4.1.6 As specified, install base flashed-cove method. Install trim cap at the top of the exposed edge of the cove. Install radius backing at the base of the wall and floor juncture to self cove base.

3.4.1.7 Terminate Commercial Sheet Vinyl Flooring at the centerline of door openings where adjacent floor is dissimilar.

3.4.1.8 Install edge strips and thresholds at all unprotected or exposed edges, and where Commercial Sheet Vinyl Flooring terminates.

3.4.1.9 Scribe Commercial Sheet Vinyl Flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4.1.10 Seams shall be heat welded. Wait a minimum of 10-hours after installation before heat welding or as per the Commercial Sheet Vinyl flooring manufacturer's installation instructions.

### 3.5 CLEANING AND FINISHING

3.5.1 Follow flooring manufacturer's recommendations to remove surplus adhesive. Do not use materials and methods that may damage the Commercial Sheet Vinyl Flooring.

3.5.2 Vacuum/sweep flooring and adjacent surfaces thoroughly.

3.5.3 Scuffed, scratched, and discolored Commercial Sheet Vinyl Flooring is unacceptable.

3.5.4 Damp mop the new flooring, but do not damp mop until after the time period recommended by the floor covering manufacturer.

#### 3.5.5 Protection

3.5.5.1 Prohibit traffic on floor finish for a minimum of 48-hours after installation.

3.5.5.2 Do not move heavy and sharp objects directly in contact with the new floor surface.

3.5.5.3 Cover and protect work from damage from subsequent construction operations so there will be no indication of use or damage at the time of acceptance.

3.5.5.4 Maintain temperature and humidity levels in accordance with the manufacturer's instructions.

3.5.5.5 Protect flooring and stair treads from traffic for 48-hours after installation to allow set of adhesive. From time of laying until acceptance, protect floor and stair treads from damage. Remove and replace defects that develop, such as damaged, loose, broken, or curled tiles.

### 3.6 WARRANTY

3.6.1 Task order specific.

3.6.1.1 Submit a One-Year Workmanship and Installer's Warranty within 5-calendar days after the "Final Acceptance Inspection" has been signed off by the Contracting Officer's representative.

3.6.1.2 Warranties shall cover all labor and materials, including labor and installation costs involved to replace defective product or workmanship.

-- End of Section --

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## SECTION 09 65 19.70

### COMMERCIAL VINYL COMPOSITION TILE, COMMERCIAL LUXURY VINYL TILE AND WALL BASE

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 The work includes removing and installing **Commercial** Vinyl Composition Tile, **Luxury Composition Tile** and Wall Base. The flooring will be installed over areas subject to heavy concentrated static and dynamic loads. The Contractor shall factor the cost to perform each Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride test into the unit ELIN.

##### 1.2 REFERENCES

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

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

|             |  |
|-------------|--|
| ASTM D 2047 | Standard Test Method for Static Coefficient of Friction of Floor Surfaces.   |
| ASTM D 2240 | Standard Test Method for Rubber Property—Durometer Hardness.   |
| ASTM D 5116 | Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products. |
| ASTM E 648  | Standard Test Method for Critical Radial Flux of Floor-Wallring Systems Using a Radiant Heat Energy Source               |
| ASTM E 662  | Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials                                  |
| ASTM E 1745 | Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs         |
| ASTM F 710  | Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring                         |
| ASTM F 970  | Standard Test Method for Static Load Limit   |
| ASTM F 1066 | Standard Test Method for Vinyl Composition Floor Tile  |
| ASTM F 1303 | Standard Specification for Sheet Vinyl Floor Wallring with Backing   |

|             |  |
|-------------|--|
| ASTM F1361  | Standard Specification for Resilient Wall Base   |
| ASTM F1516  | Standard Practice for Sealing Seams of Resilient Flooring Products by Heat Weld Method                                 |
| ASTM F 1700 | Standard Specification for Solid Vinyl Floor Tile  |
| ASTM F 1861 | Standard Test Method for   |
| ASTM F 1869 | Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. |
| ASTM F 1913 | Standard Specification for Sheet Vinyl Floor Walling without Backing   |
| ASTM F 2034 | Standard Specification for Sheet Linoleum Floor Walling.   |
| ASTM G 21   | Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi                                 |

### 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Pre-Construction Submittals

- Contractor/Installer Qualifications: Submit a portfolio with a minimum of two-years of experience installing VCT, **LVT** and Vulcanized Rubber Wall Base. Include photographs of at least five projects that have been completed over the past five years, to include the client names, current addresses, and current telephone numbers; GA, RO, PO
- Submit a copy of the Contractor's State of California Contractor's License; GA, RO, PO

SD-03 Product Data: Submit manufacturer's product specifications and literature, for each type of VCT/**LVT** and Wall Base material and accessories.

- Submit a full range of the manufacturer's standard colors and patterns for selection.
- Commercial Vinyl Composition Tile; GA, RO, PO
- **Commercial Luxury Vinyl Tile: GA, RO, PO**
- Vulcanized Rubber Wall Base; GA, RO, PO
- Stair Edging, (each type) Vulcanized Rubber and Aluminum; GA, RO, PO

- Vinyl Composition Tile Adhesive, Low VOC; GA, RO, PO
- Wall Base Adhesive, Low VOC; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Wood Floor Primer. Low VOC; GA, RO, PO
- Liquid Floor Stripper. Low VOC; GA, RO, PO
- Exposed Edge Stripping (each type), Vulcanized Rubber and Aluminum; GA, RO, PO

#### SD-04 Samples

- Commercial Vinyl Composition Tile, 2” by 2”; GA, RO, PO
- **Commercial Luxury Vinyl Tile: GA, RO, PO**
- Vulcanized Rubber Wall Base, Mfg. Wall Base Deck; GA, RO, PO

#### SD-06 Test Reports

- Submit test reports (Task Order specific) for Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete, to include a site map, which indicate the Moisture Vapor Emissions rate (MVER) and pH value for each test conducted along with a shop drawing that shows the location of each test conducted; GA, RO, PO

SD-07 Certificates: Signed and dated letter on the manufacturer’s company letterhead by the manufacturer of the product or material attesting that the product and material meets the specification requirements. The document must be dated after award of the contract and clearly name the contract identification.

- Commercial Vinyl Composition Tile; GA, RO, PO
- **Commercial Luxury Vinyl Tile: GA, RO, PO**

SD-08 Manufacturer's Instructions or CRI 104 Installation Instructions: Submit printed installation instructions describing the installation of a product or material, including special notices and Material Safety Data Sheets concerning impedance, hazards, and safety precautions.

- Commercial Vinyl Composition Tile, including surface preparation and the recommended application adhesive; GA, RO, PO
- **Commercial Luxury Vinyl Tile, including surface preparation and the recommended application adhesive: GA, RO, PO**
- Vulcanized Rubber Wall Base, including surface preparation and the recommended application adhesive; GA, RO, PO
- Stair Edging, (each type) Vulcanized Rubber Compound and Aluminum; GA, RO, PO
- **Commercial Vinyl Composition Tile Adhesive; GA, RO, PO**
- **Commercial Luxury Vinyl Tile Adhesive; GA, RO, PO**

- Wall Base Adhesive; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Wood Floor Primer; GA, RO, PO
- Liquid Floor Stripper; GA, RO, PO
- Exposed Edge Stripping (each type), Vulcanized Rubber Compound and Aluminum; GA, RO, PO

SD-11 Closeout Submittals: Provide documentation that has recorded compliance with technical and administrative requirements.

- Submit printed manufacturer's maintenance requirements for newly installed VCT/**LVT**; GA, RO, PO
- Submit a written Workmanship/Installer's One-Year Installation Warranty for newly installed VCT/**LVT**. The warranty is effective from the substantial completion date; GA, RO, PO
- Submit the Manufacturer's **Most Favorable** Warranty. The warranty is effective from the substantial completion date; GA, RO, PO

#### 1.4 DELIVERY AND STORAGE

1.4.1 Deliver materials to the project in the manufacturer's original, unopened containers with brands, names, and production runs clearly marked thereon. Handle carefully and store in original containers at no less than 65 degrees F for at least 48-hours prior to starting work. Do not open containers until they are inspected and accepted by Contracting Office.

#### 1.5 ENVIRONMENTAL CONDITIONS

1.5.1 Maintain temperature of spaces in which flooring work is to be performed at no less than 65 degrees F at floor level for 48-hours prior to starting work, during time work is performed, and for 48-hours after work is complete. Maintain minimum temperature of 55 degrees F, thereafter. Provide adequate ventilation to remove moisture and fumes from area.

1.5.2 Do not install VCT/**LVT** flooring and wall base until the room temperature range recommended by the material manufacturer in the space to be installed is met.

1.5.3 Close spaces to traffic during the VCT/**LVT** and wall base installation and for the time period after installation in accordance with the manufacturer's recommendations.

1.5.4 Install flooring and accessories after other finishing operations, including painting, have been completed.

1.5.5 Do not install flooring over new concrete slabs until the concrete has cured for a minimum of 28 days and is sufficiently dry to bond with adhesive.

1.5.5.1 Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Test in accordance with ASTM F 1869 to determine the moisture vapor emission level prior to application of the flooring system. Fill and finish all drilled or cored holes to the existing finish floor elevation.

1.5.6 The Contractor shall verify that flooring and wall base adhesives are compatible with asbestos abatement encapsulants. Only compatible adhesives and encapsulants shall be used in this contract.

1.5.7 The Contractor shall correct, at their expense, any uplifting flooring caused from their neglect to ensure proper moisture vapor emissions requirements are met prior to installation of a flooring system, from failure to use compatible adhesive with an applied encapsulant, or other factors that are result of the Contractor's negligence.

## 1.6 QUALITY ASSURANCE

1.6.1 Installer Qualifications: The installer shall be an experienced installer with a minimum of 5 years experience who has specialized in installing Commercial Vinyl Composition Tile and Wall Base, types similar to that required by this contract.

1.6.2 Source Responsibility: Obtain each type, color, and pattern of VCT/LVT and wall base specified from one source with resources to provide products of consistent quality in appearance and physical properties without delaying work.

1.6.3 Qualified Materials: Request for material approvals for any other product other than the specified and approved product must be submitted to the Contracting Officer for review, evaluation and approval prior to use, including complete application specifications, physical characteristics, and chemical resistance data. Failure of compliance with this requirement will require complete removal and replacement of the unapproved material at no cost to the Government.

## PART 2 PRODUCTS

### 2.1 FLOOR MATERIALS

2.1.1 Conform to the respective specifications and standards and to the requirements specified herein.

2.1.2 Color and Pattern: Color and pattern shall be uniformly distributed throughout thickness of the VCT/LVT. Materials of same type, patter, and color shall be of same production run and so marked. Variations in shades and off-pattern matches between containers are unacceptable. Flooring in continuous area or replacement of damaged flooring in continuous area shall be from same production run with same shade and pattern.

2.1.2.1 **Commercial** Vinyl-Composition Tile: Conform to ASTM F 1066, Composition 1, Class 2 (through pattern). Smooth surface, 12 inches by 12 inches by 1/8 (0.125) inch thick. Provide all ranges of the manufacturer's colors. Colors shall be chosen by the customer from submitted manufacturers color samples as indicated on each project.

**2.1.2.2 Commercial Luxury Vinyl Tile (LVT): The Commercial LVT shall be of layered construction consisting of a tough, clear, vinyl wear layer protecting a high-fidelity print layer on a solid vinyl backing, protected by a UV-cured polyurethane finish, and the wear surface shall be embossed with different textures to enhance each of the printed visuals. Tiles shall be in an assortment of colors are insoluble in water and resistant to cleaning agents and light. The Commercial LVT shall conform to the requirements of ASTM F 1700, 'Standard Specification for Solid Vinyl Tile', Class III, Type B - Embossed Surface and shall be for heavy traffic use. Tiles sizes shall come in a variety of widths and lengths, to include 4" x 36", 6" x 36", 6" X 48", 8" x 36", 9" X 48", 12" x 12", 12" x 24", 16" x 16" and 18" x 18". The Government understands that widths and lengths may vary from one manufacturer to another, therefore the Government will accept sizes that are in closed proximity in size the sizes ranges as stated above. Tile thickness of the LVT shall be a minimum of 0.125" thick and the wear layer shall be a minimum of a minimum of 0.020" thick. Styles shall be avalailable in decoratives, stones and naturals, traditional and speciality woods, and other various patterns. The LVT shall be maintenance free, i.e. No Polish – Spray Buff/No Buff. The LVT shall have a 10-Year manufacturer's warranty.**

2.1.3 Vulcanized Rubber Wall Base: Conform to ASTM F 1861, Type TS, Group I, Style B Standard Shoe (Wall), in approved color, and in low-gloss satin finish. Use flexible wall base to conform to the irregularities in walls, partitions, and floors. The back shall be ribbed and the top shall have top-lip design for a tight fit. Provide all ranges of the manufacturer's colors. Colors for each task order project shall be chosen by the customer from the approved submitted manufacturers color samples.

2.1.3.1 Size:

- a. Four (4) inches high, 0.125 – inch thick.
- b. Six (6) inches high, 0.125 – inch thick.
- c. Provide 0.125–inch thickness pre-molded corners in matching size, shape, and color for all right-angle inside and outside corners.
- d. Finish: Flooring manufacturer's standard high-solids finish for shine without buffing; non-flammable; compatible with factory-applied finish. May be buffed or burnished for maximum gloss.

2.1.4 Exposed Edge Strips: Provide exposed edge strips, to include transition and reducer strips for carpet and tiles, made of vulcanized rubber or aluminum (in brass or silver colors) that are approved by the flooring manufacturer.

2.1.5 Vulcanized Rubber Stair Treads: Heavy Duty Square Nose, Vulcanized Rubber, PVC Free, 3/16” minimum thickness, 1-3/8” minimum nose height, 12” minimum tread width, with abrasive ribbed design on tread. Provide all of the manufacturer’s colors.

2.1.6 Stair Nosing: Vulcanized Rubber, PVC Free, ¼” minimum thickness, Minimum thickness 0.125 inches, shall have a ribbed safety surface. Provide all of the manufacturer’s colors.

## 2.2 FLOORING PREPARATION PRODUCTS

2.2.1 Embossing Leveler: For use to level and patch on resilient flooring. Type as recommended by the flooring manufacturer.

2.2.2 Underlayment Leveler: For use on wood and on concrete for leveling and patching. Type as recommended by the flooring manufacturer.

2.2.3 Cleaning Solvents: Low toxicity and flash point in excess of 10 degrees. Low VOC.

2.2.4 Wood Floor Primer: Type as recommended by the flooring manufacturer. Low VOC.

2.2.5 Liquid Floor Stripper: Type as recommended by the flooring manufacturer. Low VOC. For use when applying new flooring over existing resilient flooring.

## 2.3 ADHESIVES

2.3.1 Floor adhesive shall be compatible with the VCT **and LVT** and floor substrate. Type as recommended by the manufacturer. Water resistant, low VOC (not to exceed 10 milligrams per square meter per hour), non-staining type and complies with the flame spread rating required for the carpet installation.

2.3.2 Wall Base Adhesive compatible with the wall base and wall surface. Type as recommended by the manufacturer

## PART 3 EXECUTION

### 3.1 EXAMINATION

3.1.1 The Contractor shall examine substrates, with the installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.

3.1.1.1 Verify that finishes of substrates comply with tolerances and other requirements specified in other contract sections and that substrates are free of cracks, ridges, depressions, and scale that might interfere with adhesion of resilient products.

3.1.1.2 Verify that floor and wall surfaces to receive flooring and wall base are free of substances which may adversely affect the adhesive and resilient materials.

3.1.1.3 Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 PREPARATION OF SURFACES

3.2.1 Prepare substrates according to the manufacturer's written recommendations to ensure adhesion of resilient products.

3.2.2 Concrete Substrates: Prepare according to ASTM F 710.

3.2.2.1 Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Tests in accordance with ASTM E 1907 to determine the suitability of the concrete substrate that is to receive resilient flooring. Proceed with installation only after the substrate passes the Moisture Vapor Transmission Tests.

3.2.2.2 Perform Alkalinity and Adhesion Tests as recommended by the manufacturer. Proceed with installation only after the substrate passes the Anhydrous Calcium Chloride Moisture Vapor Transmission Tests.

3.2.2.3 Verify that new concrete substrates are free of curing compounds, sealers, release agents, and hardeners.

3.2.2.4 Comply with ASTM F 710.

- a. Remove ridges, bumps, trowel marks, and protrusions from the substrate.
- b. Clean and remove paint, dirt, oil, grease, sealers, residual adhesives, and harmful substances which impair performance of adhesives used with the resilient product.
- c. Fill depressions, low spots, cracks, joints, holes, indentations, and other defects with self leveling underlayments. Self leveling underlayments shall be applied/installed in accordance with the manufacturer's instructions. Trowel to a smooth flat surface producing a substrate to within a tolerance of 1/8" in 10 feet.
- d. Set nail heads flush to floor. Sand all joints smooth; avoid over sanding. Fill gouges, chipped areas, and open joints with self leveling underlayment intended for this purpose. Leave joints slightly open to allow for expansion. Allow filler to dry, then sand underlayment surface smooth.
- e. Vacuum clean all surfaces to receive flooring.
- f. Prime substrate in accordance with the flooring and primer manufacturer's recommendations.

## 3.3 APPLIANCES AND FIXTURES

3.3.1 Remove and reinstall appliances, to include drinking fountains and water coolers, as specified herein. Appliances shall be reinstalled in accordance with manufacturer's installation instructions and to applicable most recent adopted Electrical, Plumbing and Mechanical Code.

3.3.1.1 Install VCT/**LVT** within 2-inches of the toilet flange.

3.3.2 Remove and replace water closets. Install new wax rings, toilet flange, securing hardware, and trim. Caulk completely around the water closet with tub and tile caulk.

## 3.4 APPLICATION

3.4.1 To avoid damage, install flooring after other tradesmen in same area have completed their work. Apply flooring and accessories in accordance with manufacturer's installation instructions, using the installer's experience in application of such flooring. Detailed requirements:

3.4.1.1 Adhesives: Apply in accordance with adhesive manufacturer's printed directions. Do not allow smoking, open flames, or other sources of ignition in area where solvent-containing adhesives are being used or spread.

3.4.1.2 Flooring: VCT/**LVT**, tile, and unit are synonymous with each other.

- a. Lay out VCT/**LVT** symmetrically about the center line of the room or space. Adjust so that the perimeter edges units are not less than one-half the width of the VCT/**LVT** width.
- b. Lay VCT/**LVT** with the bottom surface securely bonded to the substrate and top surface left smooth, clean, and free of imperfections. Use a full spread adhesive to produce a completed installation without open cracks, voids, raising and puckering at joints, and telegraphing of adhesive spreader marks.
- c. Fit VCT/**LVT** tightly so each unit is in contact with the surrounding units, and joints are aligned.
- d. Joint Pattern: Checkerboard with joints aligned in both directions in a square pattern. Where VCT/**LVT** meets thin set ceramic tile or similar hard surface flooring of higher elevation, install underlayment such that the surfaces of both flooring materials are at the same elevation or install a transition strip or reducer strip.
- e. Scribe VCT/**LVT** to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4.1.3 Wall Base: Use longest lengths possible; lengths less than 10-feet long are not permitted. Seams are not permitted between wall corners spaced less than 10-feet apart. See contract Section 16 10 33, "CARPENTRY" for wall surface repairs.

- a. Fit joints true, straight, tight, vertical and align the tops of adjacent wall base. Gaps or spaces in joints are unacceptable. Scribe wall base to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- b. Install on solid substrate backing.
- c. Bond tight to wall and floor surfaces.
- d. Scribe to door frames and other interruptions.
- e. Outside Corners: Install molded or preformed outside corner units to match the adjacent wall base.
- f. Inside Corner: Install molded or preformed inside corner units to match the adjacent wall base.

3.4.1.4 Application of Stair Treads and Nosings

- a. Fit treads and nosings carefully and securely bond with adhesive in accordance with the manufacturer's installation instructions. The nose of the rubber treads shall fit tightly against the face of stair riser or nosing. Ensure that all treads and nosings have a firm bond established.
- b. Reducers and Transition Strips: Securely install transition strips at unprotected and exposed edges. Securely install reducers where VCT/**LVT** abuts other flooring systems. Transition strips and reducers shall be installed in accordance with the manufacturer's installation instructions and shall be installed true and straight. Joints shall be true, straight, and vertical. Gaps and spaces in between abutting edge stripping are unacceptable.

3.4.1.6 Thresholds: Refer to contract Section 16 10 33, "CARPENTRY" for specifications and installation of thresholds.

### 3.5 CLEANING AND FINISHING

3.5.1 Follow flooring manufacturer's recommendations to remove surplus adhesive. Do not use materials and methods that may damage the VCT/**LVT** or wall base.

3.5.2 Vacuum/sweep flooring and adjacent surfaces thoroughly.

3.5.3 Replace all scuffed, scratched, broken, and discolored VCT/**LVT** and wall base.

3.5.4 Damp mop the new flooring, but do not damp mop until after the time period recommended by the floor covering manufacturer.

#### 3.5.5 Protection

3.5.5.1 Prohibit traffic on floor finish for a minimum of 48-hours after installation.

3.5.5.2 Do not move heavy and sharp objects directly intact with the new floor surface.

3.5.5.3 Cover and protect work from damage from subsequent construction operations so there will be no indication of use or damage at the time of acceptance.

3.5.5.4 Maintain temperature and humidity levels in accordance with the manufacturer's instructions.

3.5.5.5 Protect flooring and stair treads from traffic for 48-hours after installation to allow set of adhesive. From the time of laying until acceptance, protect floor and stair treads from damage. Remove and replace defects that develop, such as damaged, loose, broken, or curled tiles.

### 3.6 WARRANTY

#### 3.6.1 Task order specific.

3.6.1.1 Submit a One-Year Workmanship/**Installer's Warranty and the Manufacturer's most favorable warranty** within **five (5)** calendar days after the "Final Acceptance Inspection" has been signed off by the Contracting Officer's representative. The warranty shall include a warranty against bubbling due to moisture **causing tile defects** during the two-year period.

3.6.1.2 Warranties shall cover all labor and materials, including labor and installation costs involved to replace defective product or workmanship. The warranty shall include a warranty against bubbling due to moisture during the two-year period.

-- End of Section --

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**SECTION 09 67 20.26**  
**EPOXY MOSAIC COMPOSITION FLOORING**

**PART 1 GENERAL**

1.1 SUMMARY

1.1.1 Install Commercial and Industrial Epoxy Composition Flooring Systems that hold up to high traffic on concrete surfaces. Install Integral Coved Base when specified in a task order. Types of flooring systems will include decorative flooring with mosaic chips, sanitary floors, and industrial area floors. The Contractor shall test all floor surfaces for moisture. A negative moisture barrier shall be installed when moisture is present above the manufacturer's recommended limits. All floor surfaces shall be shotblasted prior to installation of a negative moisture barrier and the floor coatings to provide the manufacturer's and installer's warranty.

1.2 REFERENCES

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

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

|            |  |
|------------|--|
| ASTM C 267 | Standard Test Method for Chemical Resistance of Mortars, Grouts, and Monolithic Surfacing and Polymer Concretes  |
| ASTM C 307 | Standard Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacing   |
| ASTM C 531 | Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes. |
| ASTM C 579 | Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing and Polymer Concretes                                   |
| ASTM C 580 | Standard Test Methods for Flexural Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing  |
| ASTM C 790 | Standard Test Methods for the Use of Latex Sealing Compounds   |
| ASTM C 868 | Standard Test Method for Chemical Resistance of Protective Lining  |

|             |   |
|-------------|---|
| ASTM C 905  | Standard Test Methods for Apparent Density of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes |
| ASTM D 635  | Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position               |
| ASTM D 638  | Standard Test Method for Tensile Testing of Plastics  |
| ASTM D 695  | Standard Test Method for Compressive Properties of Rigid Plastics.  |
| ASTM D 1044 | Standard Test Method for Resistance of Transparent Plastics to Surface Abrasion   |
| ASTM D 1308 | Standard Test Method for Household Chemical & Water Resistance  |
| ASTM D 2240 | Standard Test Method for Rubber Property- Durometer Hardness  |
| ASTM D 4060 | Standard Test Method for Abrasion Resistance of Organic Coatings by Taber Abrader   |
| ASTM D 4541 | Standard Test Method for Direct Tensile Bond  |
| ASTM E 96   | Standard Test Method for Water Vapor Permeability, wet cup method   |
| ASTM E 648  | Standard Test Method for Critical Radiant Flux of Floor-Covering Systems using a Radiant Heat Energy Source                   |
| ASTM F 1869 | Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride.       |
| ASTM G 21   | Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi  |

#### **AMERICAN CONCRETE INSTITUTE**

|          |                                      |
|----------|--------------------------------------|
| ACI 503R | Use of Epoxy Compounds with Concrete |
|----------|--------------------------------------|

### 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Pre-Construction Submittals: Task Order specific:

- Submit a copy of the certificate that states the installing contractor is an approved installer of the manufacturer of the Epoxy Composition Flooring Systems; GA, RO, PO
- Contractor/Installer Qualifications: Submit a portfolio with a minimum of two-years of experience installing Epoxy Composition Flooring Systems. Include photographs of at least five projects that have been completed over the past five years, to include the client names, current addresses, and current telephone numbers; GA, RO, PO
- Submit a copy of the Contractor's State of California Contractor's License; GA, RO, PO

#### SD-03 Product Data: Submit manufacturer's product specifications and literature, for each type of carpeting material and accessories.

- Commercial and Industrial Epoxy Composition Flooring Systems. Include physical characteristics and chemical resistance data; GA, RO, PO
- Waterproofing Membrane; GA, RO, PO

#### SD-04 Samples

- Submit a minimum of 2" by 4" color combination samples of the Commercial and Industrial Epoxy Composition Flooring Systems; GA, RO, PO
- Waterproofing Membrane; GA, RO, PO

#### SD-07 Certificates:

- Material certificate signed by the manufacturer certifying that the Commercial and Industrial Epoxy Composition Flooring Systems complies with the contract specifications; GA, RO, PO

#### SD-08 Manufacture's Instruction

- Application instructions for Commercial and Industrial Epoxy Composition Flooring Systems; GA, RO, PO
- Waterproofing Membrane; GA, RO, PO

#### SD-11 Closeout Submittals

- Submit a portfolio, to include photographs, at the beginning of the preparation phase through to the finished product. Required for each project; GA, RO, PO
- Maintenance Instructions: Submit the manufacturer's written instructions for recommended maintenance practices. Required for each project; GA, RO, PO
- Submit a Two-Year Workmanship Warranty/Installer's Warranty; GA, RO, PO

## 1.4 QUALITY ASSURANCE

1.4.1 Installer Qualifications: The installer shall two (2) years as an experienced installer or applicator that has specialized in installing Commercial and Industrial Epoxy Composition Flooring Systems; types similar to that specified

in the "SUMMARY" paragraph of this contract section, and who is acceptable to the manufacturer of the primary materials.

1.4.2 Source Responsibility: Obtain Epoxy Commercial and Industrial Composition Flooring Systems materials, including primers, resins, cements, and finish or sealing coats from a single source manufacturer. Obtain marble chip aggregates and metal dividing strips from the primary manufacturer of those products.

1.4.3 Qualified Materials: Request for material approvals for any other product other than the specified and approved product must be submitted to the Contracting Officer for review, evaluation and approval prior to use, including complete application specifications, physical characteristics, and chemical resistance data. Failure of compliance with this requirement will require complete removal and replacement of the unapproved material at no cost to the Government.

## 1.5 DELIVERY, STORAGE, AND HANDLING

1.5.1 Deliver materials in original packages and containers with seals unbroken and bearing the manufacturer's labels containing brand name and direction for storage and mixing with other components.

1.5.2 Store materials to comply with the manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other detrimental effects.

## 1.6 PROJECT CONDITIONS

1.6.1 Environmental Conditions: Comply with the Commercial and Industrial Epoxy Composition Flooring Systems manufacturer's direction for maintenance of ambient and substrate temperature, moisture, humidity, ventilation, and other conditions required to execute and protect the work.

1.6.2 Concrete shall be either water cured or cured using sodium silicate compounds only. Other types of curing compounds are not acceptable. Concrete shall be cured for a minimum of 28-calendar days before installing urethane cement composition flooring systems and integral coved base.

1.6.3 Should existing site conditions interfere with the installation of Commercial and Industrial Epoxy Composition Flooring Systems, i.e. floor drains, clean-outs, etc., the Contracting Officer may require the Contractor to perform sustainment, modernization or repairs to accommodate the installation of Commercial and Industrial Epoxy Composition Flooring System.

## **PART 2 PRODUCTS**

2.1 Commercial and Industrial Epoxy Composition Flooring Systems: The Commercial and Industrial Epoxy Composition Flooring Systems shall be a troweled applied monolithic decorative flooring system, designed to produce a seamless floor and cove base when specified in a task order. When specified in a task order the epoxy flooring system shall have pre-engineered decorative aggregates embedded (broadcasted) into a colored epoxy matrix. It shall be designed to be applied over new and existing concrete surfaces. The Commercial and Industrial Epoxy Composition Flooring Systems shall provide superior performance which withstands heavy abuse and impact, and shall be scratch resistant. The Commercial and Industrial Epoxy Composition Flooring Systems shall be resistant to algae, bacteria, fungi, mold, mildew, yeast, and does not promote microbial growth.

2.1.1 The Commercial and Industrial Epoxy Composition Flooring Systems shall meet the following: ASTM C 267, ASTM C 307, ASTM C 579, ASTM C 580, ASTM C 868, ASTM D 635, ASTM D 638, ASTM D 695, ASTM-D-1044, ASTM D 1308, ASTM D 4541, ASTM D 2240, ASTM D 4060, ASTM G 21, ASTM E 648, and ASTM F 1869.

## 2.2 PRE-ENGINEERED DECORATIVE AGGREGATES

2.2.1 Manufacturer's standard quartz colored aggregates made of 100% solids. The Contractor shall submit all of the manufacturer's available colors.

2.3 Moisture Vapor Transmission: Perform Anhydrous Calcium Chloride Moisture Vapor Transmission Test in accordance with ASTM F 1869 to determine the moisture vapor emission level prior to application of any component of the flooring system. Fill and finish all drilled or cored holes to the existing finish floor elevation.

## 2.4 SUPPLEMENTAL MATERIALS

2.4.1 Waterproofing Membrane: Required in spaces where floor drains, cleanouts, and areas subject to continuous spillage and service. Obtain waterproofing membrane from the primary manufacturer of those products.

## **PART 3 EXECUTION**

### 3.1 INSPECTION

3.1.1 Examine the areas and conditions where the Commercial and Industrial Epoxy Composition Flooring Systems are to be installed. Notify the Contracting Officer of conditions detrimental to the proper and timely completion of work. Do not proceed with the work until all unsatisfactory conditions have been corrected (by the Contractor) in a manner acceptable by the Contracting Officer.

3.1.2 Perform a Anhydrous Calcium Chloride Moisture Vapor Transmission Test in accordance with ASTM F 1869 to determine the moisture vapor emission level prior to application of any component of the flooring system. Do not install flooring over substrate with an MVTER level of 6 lbs. Per 24-hour period over a 1000-square foot area. Notify the Contracting Officer if MVTER levels exceed this level. Submit the test results to the Contracting Officer for review and direction to proceed. Fill and finish all drilled or cored holes to the existing finish floor elevation.

### 3.2 PREPARATION

3.2.1 Concrete Surfaces: Perform preparation and cleaning procedures according to the manufacturer's instructions. Provide a clean, dry, and neutral surface prior to the application of the Commercial and Industrial Epoxy Composition Flooring Systems.

3.2.1.2 Shot blast, or power scarify as required to obtain the optimum bond for the Commercial and Industrial Epoxy Composition Flooring Systems to the concrete surface. Acid etching is forbidden under any circumstances. Remove sufficient material to provide a sound surface, free of laitance, glaze, efflorescence, and any bond inhibiting curing compounds or form release agents. Remove grease, oil, and other penetrating contaminants. Repair damaged and deteriorated concrete to acceptable conditions. Leave surface free of dust, dirt, laitance, and efflorescence.

3.2.3 Materials: Mix the Commercial and Industrial Epoxy Composition Flooring System components in accordance with the manufacturer's instructions.

### 3.3 APPLICATION

3.3.1 General: Apply each component of the Commercial and Industrial Epoxy Composition Flooring Systems in accordance with the manufacturer's instructions to produce a uniform monolithic surface of the specified thickness.

3.3.2 Bond Coat: Apply a bond coat over the prepared substrate at the manufacturer's recommended spreading rate.

3.3.3 Body Coat: Over primer, trowel apply epoxy color mortar at a nominal 1/8-inch thickness; hand trowel and back roll with a spike roller. Allow to cure before proceeding to the next step or operation.

3.3.4 Finish or Sealing Coats: After the body coat has cured sufficiently, lightly sand and apply sealer.

3.3.4.1 The final finish coat shall be of a color and skid resistant profile as specified by the Contracting Officer.

3.3.4.2 The finished floor shall be a minimum of 1/4-inch thick, uniform in thickness, color, and free of trowel marks.

3.3.5 Wall/Cove Base: Install a 3/4" x 3/4" cant strips at the base of the floor and wall prior to application of the wall/cove base. The cant strip is required to a radius from the floor to wall transition. Apply wall/cove base mix to the wall surfaces, when specified in a task order, to form a wall/cove base height of 4 to 6-inches high. Follow the manufacturer's written instructions and details including taping, mixing, priming, troweling, sanding, and top coating of the wall/cove base.

### 3.4 CURING, PROTECTION, AND CLEANING

3.4.1 Allow Commercial and Industrial Epoxy Composition Flooring Systems to cure in accordance with the manufacturer's instructions, taking care to prevent contamination during application stages and before competing curing process. Close off the application area for a minimum of 24-hours after application.

4.4.2 Remove masking. Perform detail cleaning.

### 3.5 WARRANTY

3.5.1 Submit a Two-Year Workmanship and Installer's Warranty within 5-calendar days after the "Final Acceptance Inspection" has been signed off by the Contracting Officer's representative.

3.5.1.1 Warranties shall cover all labor and materials, including labor and installation costs involved to replace defective product or workmanship. The warranty shall include a warranty against bubbling due to moisture during the two-year period.

-- End of Section --

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## SECTION 09 67 20.27

### NEGATIVE SIDE MOISTURE VAPOR CONTROL MEMBRANE

#### PART 1 GENERAL

##### 1.1 SUMMARY

1.1.1 Install a Negative Side Moisture Vapor Control Barrier to provide a barrier between the concrete surface and Commercial and Industrial Epoxy Flooring Systems. The . Negative Side Moisture Vapor Control Barrier shall be installed only when the Anhydrous Calcium Chloride concrete moisture vapor emission test indicates a moisture content that is at or above what the manufacturer of the Commercial and Industrial Epoxy Flooring System recommends and to provide a Two-Year Workmanship and Installer's warranty.

##### 1.2 REFERENCES

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

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

|            |  |
|------------|--|
| ASTM C 267 | Standard Test Method for Chemical Resistance of Mortars, Grouts, and Monolithic Surfacing and Polymer Concretes  |
| ASTM C 307 | Standard Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacing   |
| ASTM C 531 | Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes. |
| ASTM C 579 | Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing and Polymer Concretes                                   |
| ASTM C 580 | Standard Test Methods for Flexural Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing  |
| ASTM C 790 | Standard Test Methods for the Use Of Latex Sealing Compounds   |
| ASTM C 868 | Standard Test Method for Chemical Resistance of Protective Lining  |
| ASTM C 905 | Standard Test Methods for Apparent Density of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing, and Polymer Concretes                                      |

|             |   |
|-------------|---|
| ASTM D 635  | Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position         |
| ASTM D 638  | Standard Test Method for Tensile Testing of Plastics  |
| ASTM D 695  | Standard Test Method for Compressive Properties of Rigid Plastics.  |
| ASTM D 1308 | Standard Test Method for Household Chemical & Water Resistance  |
| ASTM D 2240 | Standard Test Method for Rubber Property- Durometer Hardness  |
| ASTM D 4060 | Standard Test Method for Abrasion Resistance of Organic Coatings by Taber Abrader                                       |
| ASTM D 4541 | Standard Test Method for Direct Tensile Bond  |
| ASTM E 96   | Standard Test Method for Water Vapor Permeability, wet cup method   |
| ASTM E 648  | Standard Test Method for Critical Radiant Flux of Floor-Covering Systems using a Radiant Heat Energy Source             |
| ASTM F 1869 | Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride. |
| ASTM G 21   | Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi                                  |

#### **AMERICAN CONCRETE INSTITUTE**

|          |                                      |
|----------|--------------------------------------|
| ACI 503R | Use of Epoxy Compounds with Concrete |
|----------|--------------------------------------|

### 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Pre-Construction Submittals

- Submit a copy of the certificate that states the installing contractor is an approved installer of the manufacturer of the Negative Side Moisture Vapor Control Barrier; GA, RO, PO
- Contractor/Installer Qualifications: Submit a portfolio with a minimum of two-years of experience installing Negative Side Moisture Vapor Control Barrier. Include photographs of at least five projects

that have been completed over the past five years, to include the client names, current addresses, and current telephone numbers; GA, RO, PO

- Submit a copy of the Contractor's State of California Contractor's License; GA, RO, PO

SD-03 Product Data: Submit manufacturer's product specifications and literature, for each type of carpeting material and accessories. Contract specific.

- Negative Side Moisture Vapor Control Barrier. Include physical characteristics and chemical resistance data; GA, RO, PO
- Crack Filler; GA, RO, PO

SD-04 Samples: Contract specific.

- Submit a minimum of 2" by 4" sample of the negative side moisture vapor control barrier. Contract specific; GA, RO, PO

SD-06 Test Reports: Task order specific.

- Submit test reports of the performed Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride, to include a site map which indicates the Moisture Vapor Emissions rate (MVER) and pH value for each test performed and a shop drawing that indicates the location where each test was performed; GA, RO, PO

SD-07 Certificates: Contract specific.

- Material certificate signed by the manufacturer of the Negative Side Moisture Vapor Control Barrier certifying that the synthetic resin composition moisture barrier system complies with contract specifications; GA, RO, PO

SD-08 Manufacture's Instruction: Contract specific.

- Application instructions for Negative Moisture Vapor Control Barrier. Contract specific; GA, RO, PO
- Crack Filler. Contract specific; GA, RO, PO

SD-11 Closeout Submittals: Task Order specific.

- Submit a portfolio, to include photographs beginning at the preparation phase through to the completion of each project; GA, RO, PO
- Submit a Two-Year Workmanship Warranty/Installer's Warranty; GA, RO, PO

## 1.4 QUALITY ASSURANCE

1.4.1 Installer Qualifications: The installer shall be an experienced installer or applicator that has specialized in installing negative side moisture vapor control barrier, types similar to that required by this contract, and who is acceptable to the manufacturer of the primary materials.

1.4.2 Single Source Responsibility: Obtain synthetic resin composition materials, including primers, resins, hardening agents, and finish or sealing coats from a single source manufacturer.

1.4.3 Qualified Materials: Request for material approvals for any other product other than the specified and approved product must be submitted to the Contracting Officer for review, evaluation and approval prior to use, including complete application specifications, physical characteristics, and chemical resistance data. Failure of compliance with this requirement will require complete removal and replacement of the unapproved material at no cost to the Government.

## 1.5 DELIVERY, STORAGE, AND HANDLING

1.5.1 Deliver materials in original packages and containers with seals unbroken and bearing the manufacturer's labels containing brand name and direction for storage and mixing with other components.

1.5.2 Store materials to comply with the manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other detrimental effects.

## 1.6 PROJECT CONDITIONS

1.6.1 Environmental Conditions: Comply with negative side moisture vapor control barrier manufacturer's direction for maintenance of ambient and substrate temperature, moisture, humidity, ventilation, and other conditions required to execute and protect work.

## **PART 2 PRODUCTS**

### 2.1 NEGATIVE SIDE MOISTURE VAPOR CONTROL BARRIER

2.1.1 The Negative Side Moisture Vapor Control Barrier shall be a fluid applied modified epoxy moisture mitigation system. It shall be designed to be used as a negative side vapor transmission barrier that will withstand moisture vapor emission rates (MVER) of 15 lbs/1000 sq/ft/24-hours, as well as high pH levels. It shall have a recommended use application under impervious non-breathing flooring systems that cannot withstand moisture vapor transmission levels with MVER rates above the floor covering manufacturer's recommended levels.

2.1.1.1 The negative side moisture vapor control barrier shall meet the following: ASTM D 4541, ASTM D 695, ASTM D 638, ASTM D 1308, ASTM G 21, and ASTM E 96.

## **PART 3 EXECUTION**

### 3.1 INSPECTION

3.1.1 Examine the areas and conditions where negative side moisture vapor control barrier system is to be installed. Notify the Contracting Officer of conditions detrimental to the proper and timely completion of work. Do not proceed with the work until all unsatisfactory conditions have been corrected in a manner acceptable by the Contracting Officer.

3.1.2 Perform an Anhydrous Calcium Chloride Moisture Vapor Transmission Test on concrete in accordance with ASTM F 1869. Fill and finish all drilled or cored holes to the existing finish floor elevation. Submit the test results to the Contracting Officer for review and direction to proceed.

### 3.2 PREPARATION

3.2.1 Substrate: Perform preparation and cleaning procedures according to the manufacturer's instructions for particular substrate conditions involved, and as specified. Provide clean, dry, and neutral substrate application of the negative side moisture vapor control barrier system.

3.2.2 Concrete Surfaces: Shot blast, or power scarify as required to obtain optimum bond of negative side moisture vapor control barrier system to the concrete surface. Acid etching is forbidden under any circumstances. Remove sufficient material to provide a sound surface, free of laitance, glaze, efflorescence, and any bond inhibiting curing compounds or

form release agents. Remove grease, oil, and other penetrating contaminants. Repair damaged and deteriorated concrete to acceptable conditions. Leave surface free of dust, dirt, laitance, and efflorescence.

3.2.3 Crack Treatment: Crack repair shall be accomplished with standard and recognized practices for type and size of crack being specifically addressed.

3.2.4 Materials: Mix the resin catalyst and aggregate when required, and prepare materials in accordance with the negative side moisture vapor control barrier system manufacturer's instructions.

### 3.3 APPLICATION

3.3.1 Apply each component of the negative side moisture vapor control barrier system in accordance with the manufacturer's instructions to produce a uniform monolithic surface of the recommended thickness.

3.3.2 Apply the negative side moisture vapor control barrier system at a minimum rate of 115-square feet per gallon or in accordance with the manufacturer's recommendation, whichever is more stringent. Apply the negative side moisture vapor control barrier system with a notched squeegee or with applicators recommended by the manufacturer. After the material has been spread, backroll with a spiked or loop roller to release any entrapped air and allow the coating to flow out evenly. Avoid applying the material in direct sunlight or in rising elevated temperatures.

3.3.3 Apply a second coat within 36-hours of the first coat. Do not wet the coating for application of subsequent coats. Apply with a squeegee and backroll as specified in the previous application specification.

3.3.4 Apply a topping mortar in accordance with the negative side moisture vapor control barrier system manufacturer's instructions. Apply topping to have a smooth even finish. Allow to cure before any other steps. Sand and remove any surface imperfections or roughness as required.

### 3.5 CURING, PROTECTION, AND CLEANING

3.5.1 Allow the Negative Side Moisture Vapor Control Barrier System to cure in accordance with the manufacturer's instructions, taking care to prevent contamination during application stages and before competing curing process. Close off the application area for a minimum of 24 hours.

3.5.2 Remove masking when the application is complete. Perform detail cleaning.

### 3.6 WARRANTY

3.6.1 Submit a Two-Year Workmanship and Installer's Warranty within 5-calendar days after the "Final Acceptance Inspection" has been signed off by the Contracting Officer's representative.

3.6.1.1 Warranties shall cover all labor and materials, including labor and installation costs involved to replace defective product or workmanship. The warranty shall include a warranty against bubbling due to moisture during the two-year period.

-- End of Section --

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## SECTION 09 68 00

### CARPET

#### PART 1 GENERAL

##### 1.1 Description

1.1.1 The work includes removing and installing carpeted flooring. The flooring will be installed over areas subject to heavy concentrated static and dynamic loads. The Contractor shall factor the cost to perform each Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride test into the unit ELINs.

##### 1.2 REFERENCES

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

#### AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

|           |  |
|-----------|--|
| AATCC 16  | (2004) Colorfastness to Light                                |
| AATCC 20  | Fiber Analysis-Qualitative                                   |
| AATCC 107 | (2002) Colorfastness to Water                                |
| AATCC 129 | Colorfastness to Ozone in the Atmosphere Under High Humidity |
| AATCC 134 | (2006) Electrostatic Propensity of Carpets                   |
| AATCC 165 | (1999) Colorfastness to Crocking- AATCC Crockmeter Method    |
| AATCC 174 | (1998) Antimicrobial Activity Assessment of Carpets          |

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

|             |  |
|-------------|--|
| ASTM D 297  | (1993; Rev 2006) Rubber Products – Chemical Analysis                         |
| ASTM D 418  | Testing Pile Yarn Floor Covering Construction                                |
| ASTM D 1335 | Standard Test Method for Tuft Bind of Pile Floor Coverings                   |
| ASTM D 1423 | (2002) Standard Test Method for Twist in Yarns by the Direct-Counting Method |

|             |   |
|-------------|---|
| ASTM D 1667 | (2005) Flexible Cellular Materials-Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam)                            |
| ASTM D 2257 | Extractable Matter in Textiles  |
| ASTM D 2859 | Standard Test Method for Ignition Characteristics of Finished Textile Covering Materials                                |
| ASTM D 3676 | (2001) Standard Test Method for Rubber Cellular Cushion used for Carpet or Rug Underlay                                 |
| ASTM D 3278 | (1996; R 2004e1) Flash Point of Liquids by Small Scale Closed-Cup Apparatus   |
| ASTM D 3936 | Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering                |
| ASTM D 5116 | Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products |
| ASTM D 5252 | (2005) Standard Practice for the Operation of the Hexapod Drum Tester   |
| ASTM D 5417 | (2005) Standard Practice for the Operation of the Vetterman Drum Tester   |
| ASTM D 5848 | (2005) Mass Per Unit Area of Pile Yarn Floor Coverings  |
| ASTM E 648  | (2006a) Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source                              |
| ASTM E 662  | Standard Test Method for Specific Optical density of Smoke Generated by Solid Materials                                 |
| ASTM E 2129 | (2005) Standard practices for Data Collection for Sustainability Assessment of Building Products                        |

#### **CODE OF FEDERAL REGULATIONS (CFR)**

|             |   |
|-------------|---|
| 16 CFR 1630 | Standard for the Surface Flammability of Carpet and Rugs (FF 1-70)          |
| 40 CFR 247  | Comprehensive Procurement Guide for Products Containing recovered Materials |

#### **CARPET AND RUG INSTITUTE (CRI)**

|           |  |
|-----------|--|
| CRI TM101 | Assessment of Carpet Surface Appearance Change |
| CRI TM102 | Fluorochemical Finishes                        |
| CRI 104   | (2002) Installation of Commercial Carpet       |

**CONSUMER PRODUCT SAFETY COMMISSION (CPSC)**

|              |                       |
|--------------|-----------------------|
| CPSC ff-1-70 | Methenamine Pill Test |
|--------------|-----------------------|

**FEDERAL SPECIFICATIONS (FS)**

|               |  |
|---------------|--|
| FS DDD-C-0095 | Carpet and Rugs, Wool, Nylon, Acrylic, Modacrylic Polyester, Polypropylene |
|---------------|--|

**AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)**

|          |  |
|----------|--|
| ISO 2551 | (1981) Machine-made Textile Floor Coverings—Determination of Dimensional Changes Due to Effects Varied Water and Heat Conditions ISO 2551 (Aachen Test). (Previously DIN 54318, Aachen Dimensional Stability Test) |
|----------|--|

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)**

|          |  |
|----------|--|
| NFPA 101 | Life Safety Code   |
| NFPA 253 | (2005) Standard Test of Critical Radiant Flux of Floor Covering Systems using a Radiant Heat Energy Source |

**U.S. GENERAL SERVICES ADMINISTRATION (GSA)**

|  |                                     |
|--|-------------------------------------|
| FS-SS-W-40 (Rev A; Int Am 1, Notice 1) | Wall Base; Rubber and Vinyl Plastic |
|--|-------------------------------------|

**U.S. GREEN BUILDING COUNCIL (USGBC)**

|      |   |
|------|---|
| LEED | (2002; r 2005) leadership in Energy and Environmental Design™ Green Building Rating System for New Construction (LEED – NC) |
|------|---|

**WOOLMARK BUSINESS INTELIGENCE (WBI)**

|          |  |
|----------|--|
| Woolmark | (1964) Certification for Use of 100 Percent Wool |
|----------|--|

**1.3 SUBMITTALS**

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for Contractor Quality Control approval. When used, a designation following the "GA" designation identifies the office

that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

#### SD-01 Pre-Construction Submittals

- Contractor/Installer Qualifications: Submit a portfolio with a minimum of two-years of experience installing carpet. Include photographs of at least five projects that have been completed over the past five years, to include the client names, current addresses, and current telephone numbers; GA, RO, PO
- Submit a copy of the Contractor's State of California Contractor's License; GA, RO, PO

SD-03 Product Data: Submit manufacturer's product specifications and literature, for each type of carpeting material and accessories.

- High Performance Carpet; GA, RO, PO
- Modular High Performance Carpet (Carpet Tile); GA, RO, PO
- Textured Cut Pile Carpet (Tack Down) ; GA, RO, PO
- Carpet Adhesive, (for the following applications: glue down carpet, modular carpet, and double glue down high density cushion) Low VOC; GA, RO, PO
- Underlayment Leveler; GA, RO, PO
- Hot Melt Tape, Low VOC; GA, RO, PO
- Rebond Cushion for Commercial use; GA, RO, PO
- Attached Cushion for Commercial use; GA, RO, PO
- 100% Bonded Urethane Cushion; GA, RO, PO
- Cleaning Solvent. Low VOC; GA, RO, PO
- Wood Floor Primer. Low VOC; GA, RO, PO
- Liquid Floor Stripper. Low VOC; GA, RO, PO
- Exposed Edge Stripping (each type), Vulcanized Rubber and Aluminum; GA, RO, PO
- Stair Edging, (each type) Vulcanized Rubber and Aluminum; GA, RO, PO

#### SD-04 Samples:

- Submit the manufacturer's standard size samples showing a full range of colors and patterns (including full pattern repeat) available for each type of carpet; GA, RO, PO
- Submit samples of each type of exposed edge stripping (transition strip), vinyl cove base (4-inch and 6-inch), and accessory items showing full range of standard colors; GA, RO, PO
- High Performance Carpet; GA, RO, PO

- Modular High Performance Carpet (Carpet Tile); GA, RO, PO
- Textured Cut Pile Carpet; GA, RO, PO
- Vulcanized Rubber Wall Base; GA, RO, PO
- Exposed Edge Stripping (each type), Synthetic Rubber Compound and Aluminum; GA, RO, PO
- Stair Edging, (each type) Vulcanized Rubber and Aluminum; GA, RO, PO
- Rebond Cushion for Commercial use; GA, RO, PO
- Attached Cushion for Commercial use; GA, RO, PO
- 100% Bonded Urethane Cushion; GA, RO, PO

#### SD-06 Test Reports

- Submit test reports of the performed Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride, to include a site map which indicates the Moisture Vapor Emissions rate (MVER) and pH value for each test performed and a shop drawing that indicates the location where each test was performed; GA, RO, PO

SD-07 Certificates: Signed and dated letter on the manufacturer's company letterhead by the manufacturer of the product or material attesting that the product and material meets the specification requirements. The document must be dated after award of the contract and clearly name the contract identification.

- High Performance Carpet; GA, RO, PO
- Modular High Performance Carpet (Carpet Tile); GA, RO, PO
- Textured Cut Pile Carpet (Tack Down) ; GA, RO, PO
- Rebond Cushion; GA, RO, PO
- 100% Bonded Urethane Cushion; GA, RO, PO

SD-08 Manufacturer's Instructions or CRI 104 Installation Instructions: Submit printed installation instructions describing the installation of a product or material, including special notices and Material Safety Data Sheets concerning impedance, hazards, and safety precautions.

- Carpet installation instructions for High Performance Carpet, Modular High Performance Carpet, and Textured Cut Pile Carpet (Tack Down), including preparation of substrate, installation of padding, seaming techniques, and recommended adhesives and tapes where applicable; GA, RO, PO
- Vulcanized Rubber Wall Base installation instructions, including surface preparation and the recommended application adhesive; GA, RO, PO

SD-11 Closeout Submittals: Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

- Submit the printed manufacturer’s maintenance requirements for newly installed carpeting to the Contracting Officer’s representative within 5-calendar days after the “Final Acceptance Inspection” has been signed off; GA, RO, PO
- Submit a One-Year Workmanship and Installer’s Warranty for newly installed carpet to the Contracting Officer’s representative within 5-calendar days after the “Final Acceptance Inspection” has been signed off; GA, RO, PO
- Submit all of the manufacturer’s warranties to the Contracting Officer’s representative within 5-calendar days after the “Final Acceptance Inspection” has been signed off; GA, RO, PO

#### 1.4 CONTRACTOR EXPERIENCE

1.4.1 Contractor Experience: All work shall be done by installation firms specializing in commercial carpet installation. The firm shall be a member of the Floor Covering Installation Contractor's Association (FCICA) or certified by the Floor Covering Installation Board. (FCIB) and shall have a current State of California Contractor’s license.

#### 1.5 DELIVERY AND STORAGE

1.5.1 Comply with CRI 104, Section 5 “Storage and Handling.”

1.5.2 Comply with instructions and recommendations of the manufacturer for delivery, storage, and handling requirements. Deliver carpet to the site in manufacturer's original wrappings and packages clearly labeled with the manufacturer's name, brand name, and related information. Attach register number to each roll or stencil on the bale. Store in a safe, dry, clean, and well ventilated area. Store rolls flat, not standing on end and do not stack anything on top of carpet rolls. Do not open containers or wrap until needed for installation unless verifying inspection is required.

#### 1.6 SAFETY

1.6.1 Carpet adhesives may contain toxic volatile components. Follow ventilation, personal protection, and other safety precautions as recommended by the manufacturer of the adhesive.

#### 1.7 REGULATORY REQUIREMENTS

1.7.1 Indoor Air Quality (IAQ): Carpet shall bear the Carpet and Rug Institute (CRI) Indoor Air Quality (IAQ) Label. Carpet type bearing the label will indicate that carpet has been tested and meets the criteria of the CRI Green Label Plus Requirements for Indoor Air Quality Test Criteria.

1.7.2 Federal ADA Requirements: The installed carpet shall conform to Federal ADA Requirements Section 4 “Accessible Elements and Spaces Scope and Technical Requirements” Paragraph 4.5 “Ground and Floor Surfaces.”

1.7.2.1 The latest edition of the Federal ADA Accessibility Guides for Buildings and Facilities (ADAAG) shall govern in all circumstances.

#### 1.8 PROJECT CONDITIONS

1.8.1 Comply with CRI 104, Section 6.1 “Site Conditions; Temperatures and Humidity.”

1.8.2 Environmental Conditions: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for the project when occupied for its intended use.

1.8.3 Do not install carpet over concrete slabs until slabs have cured for 28-calendar days and are sufficiently dry to bond with adhesive and concrete slabs have a pH range recommended by the carpet and carpet tile manufacturer.

## 1.9 SEQUENCING AND SCHEDULING

1.9.1 Coordinate work of this section with other work to ensure that the installed carpeting materials are not damaged or soiled.

## 1.10 QUALITY ASSURANCE

1.10.1 A label of the Federal Label Requirements, as stated in the Textile Products Identification Act under the Federal Trade Commission, shall be attached to the certification samples and the products delivered.

1.10.2 For each color, furnish carpet from one dye lot only.

## 1.11 MANUFACTURED UNITS

1.11.1 Products shall have a lead-time of not to exceed more than six (6) weeks from the time the dealer/manufacturer/wholesaler receives the order to the time the Contractor is to install the product for the Government.

1.11.1.1 The Contractor shall provide the Contracting Officer with a vendor's letter stating that there is a lead-time for ordered carpet. The letter shall be on the vendor's letterhead, and signed and dated by the vendor. The letter shall state the date the carpet was ordered and the date expected to receive shipment.

1.11.2 Patterns and colorways shall be available for a minimum of five (5) years.

1.11.3 All products within the same floor shall be of the same dye lot.

## **PART 2 PRODUCTS**

2.1.1 Manufacturers: Subject to contract compliance and requirements, manufacturers offering products that may be incorporated in to the work include, but are not limited to, those listed below:

Collins and Aikman Floorcoverings, Inc ([www.cafloorcoverings.com](http://www.cafloorcoverings.com))

Crossley Carpet Mills, Limited ([www.crossley.ca](http://www.crossley.ca))

Interface Company ([www.interfaceinc.com](http://www.interfaceinc.com))

Lees Commercial Carpets Division/Burlington Industries, Inc. ([www.leescarpets.com](http://www.leescarpets.com))

Lowes carpet Corporation ([www.basf.com](http://www.basf.com))

Milliken Contract carpets ([www.miliken.com](http://www.miliken.com))

Mohawk ([www.mohawkcarpets.com](http://www.mohawkcarpets.com))

Patcraft ([www.patcraft.com](http://www.patcraft.com))

Richmond Carpet Mills, Inc. ([www.richmondcpt.com](http://www.richmondcpt.com))

Shaw Contract Group ([www.shawcontract.com](http://www.shawcontract.com))

Chris Craft International Products (Waterford, New York)

Dixie Manufacturing Corporation (Norfolk, Virginia)

### 2.1.2 Carpet Materials

2.1.2.1 Carpet shall be broadloom or modular (carpet tile).

2.1.2.2 Broadloom glue down carpet shall be textured single level loop pile. Not cut pile.

- a. Broadloom textured (Tack Down) carpet shall be textured cut pile.

2.1.2.3 Modular carpet shall be single textured level loop pile.

2.1.2.4 Compatibility: Provide carpet or carpet tiles, seam sealers, adhesives, and other related materials that are compatible with one another and with substrates under service and application.

2.1.2.5 Carpet Minimum Physical Performance Requirements:

- a. Appearance Retention Rating (ARR): Severe (short-term not less than 4.0, long-term not less than 3.5) based on ASTM D 5222 (Hexapod) using 3750-gram tumbler, or ASTM D 5417 (Vetterman) test method. Carpets shall be tested without underlay. The exposure conditioned carpet shall be assessed according to CRI TM101.
- b. Tuft Bind Loop Pile: ASTM D 1335, Minimum average value 12.0 pounds (10 years).
- c. Twist Bind Cut Pile: ASTM D 1335 and ASTM D 1423, Average Minimum 5 pounds (10 years).
- d. Dimensional Stability: Maximum shrinkage 1.0 percent in both length and width.
- e. Delamination Resistance of the Secondary Backing: Not less than 3.0 pounds per inch.
- f. Colorfastness (entire colorline):
  - i. To Crocking: Color transfer Class 4 minimum, wet and dry, when tested as specified. No stain by crocking per AATCC 165 (10 years).
  - ii. To Light: Color contrast between exposed and unexposed carpet areas equivalent to a minimum of Grade 4 on the Gray Scale for Color Change after an exposure to 60 ASFU (AATCC 16E Fading Units) for all colors.
  - iii. Atmospheric Fading: AATCC 129 Ozone, and AATCC 164 Oxides of Nitrogen (10 years). No change in color due to atmospheric contaminants.
- g. Fluorochemical Finish: Measures the amount of soil resistance chemical on the fiber. Minimum average of 350 parts per million (ppm) fluorine on the pile fiber when tested in accordance with AATCC 189 (formerly CRI TM-102).
- h. Antimicrobial Activity: Inherently antimicrobial, topical finishes not allowed. Pass standards for inhibiting bacteria and fungus per AATCC 174, Parts I, II, III. Lifetime warranted.
- i. Soil/Stain Resistant: No apparent stain per AATCC 6, AATCC 123, and AATCC 175 (10 years).
- j. Dry Breaking Strength: Not less than 100 lbs/sq. foot per ASTM D 2646.
- k. Wear shall not exceed 10 percent of pile face fiber by weight for 10 years.
- l. Edge Ravel: Properly installed and under normal use, no edge ravel for 10 years.
- m. Backing Integrity: No delamination for 10 years.
- n. Static Generation: Less than 3.5 kV per AATCC 134 for 10 years.

- o. Flammability:
  - i. Methenamine Pill Test: CPSC FF 1-70, when used in accordance with ASTM D 2859.
  - ii. Radiant Panel: ASTM E 648; Class 1, minimum critical radiant flux of 0.45 watts/cm<sup>2</sup>.
  - iii. Smoke Density: ASTM E 662; Maximum of 450 tested in accordance with the NFPA 258, ASTM E 662, and UBC Standard 42-1.
- p. Indoor Air Quality (IAQ):
  - i. Carpet: Shall be from a manufacturer that is certified with the CRI IAQ Carpet Testing Program Green Label Plus. The carpet shall have the CRI Green Label Plus designation visible for inspection prior to installation. Maximum of 0.5 mg/m<sup>2</sup>hr total VOC emission, ASTM D5116.
  - ii. Adhesive: Shall be only those certified with the CRI IAQ Adhesive Testing Program Green Label or tested for compliance to meet the CRI IAQ Adhesive Testing Program Green Label requirements and criteria.
  - iii. All products (carpet, seam sealer, cushion, and adhesives) from current production must be re-tested on a quarterly basis to ensure compliance with the CRI IAQ Test program requirements. The Contractor shall provide the Government with the quarterly testing performed as specified.

### 2.1.3 Material Requirements

2.1.3.1 Textured Cut Pile Carpet (Tack Down): Product type is Broadloom. Provide carpet from manufacturer's standard stock. Carpet shall be first quality; and free of visual blemishes, streaks, poorly dyed areas, and other physical and manufacturing defects. Use nontoxic carpet materials and treatments, reasonably non-allergenic, and free of other recognized health hazards. Conform to the following:

- a. Construction: Tufted.
- b. Surface Appearance: Solid Cut Pile.
- c. Pile Fiber: 100% Continuous Filament Nylon.
- d. Gauge: 1/10; ASTM D 418
- e. Yarn Face Weight: ~~Maximum~~ **Minimum** 34 oz/ sq. yd.
- f. Pile Thickness: Minimum 0.191.
- g. Pile Height: 0.500 inches.
- h. Stitches Per Inch: Minimum of 12 per inch.
- i. Twists Per Inch: Minimum of 6.
- j. Dye Method: Solution Dyed.
- k. Pile Density: Minimum 6000 oz/cu. yd.
- l. Weight Density: 256,000.
- m. Primary Backing: Woven Polypropylene.

- n. Backing Foundation: Single Primary.
- o. Secondary Backing: Woven Polypropylene.
- p. Color: Provide a minimum of 18 colors.

#### 2.1.3.2 100% Bonded Urethane Cushion

- a. FS L-C-001676, CLASS 1, 10 mm 3/8 inch thick, Density 3.50; made from 15-50 percent of post consumer total recovered content.

2.1.3.2 High Performance Carpet (Glue Down): Product type is ~~6-foot~~ **12-foot** Closed Cell Vinyl Cushion Broadloom. Provide carpet from manufacturer's standard stock. Carpet shall be first quality; and free of visual blemishes, streaks, poorly dyed areas, and other physical and manufacturing defects. The carpet backing system shall have an impermeable closed cell cushion moisture barrier. No wet adhesives are to be used. The backing system shall have a minimum of 7% percent overall post consumer content, be 100% recyclable back into carpet meet FTC Guides for recycling and have third party certification for all claims. Use nontoxic carpet materials and treatments, reasonably non-allergenic, and free of other recognized health hazards. Conform to the following:

- a. Construction Type: Textured Level Loop.
- b. Construction: Tufted.
- c. Pile Fiber: Commercial branded Type 6,6 100% Continuous Filament Nylon.
- d. Yarn Face Weight: **Maximum** 28 oz/sq. yd per ASTM D 5848.
- e. Finished Pile Thickness: 0.150 inch average minimum.
- f. Pile Height: 0.250 average maximum.
- g. Pile Density: Minimum 6,000 oz/cu yd. Minimum per ASTM D 418.
- h. Weight Density: Minimum 188,000 per ASTM D 418.
- i. Tufts Per Inch: Minimum 11 Tufts per square inch.
- j. Primary Backing: Woven Polypropylene.
- k. Secondary Backing: Woven Polypropylene.
- l. Total Weight: 140 oz/sq. yd. average minimum.
- m. Dye Method: Solution Dyed.
- n. Color: Provide a minimum of 18 colors.

2.1.3.3 Modular Carpet (Carpet Tile). Provide carpet from manufacturer's standard stock. Carpet shall be first quality; and free of visual blemishes, streaks, poorly dyed areas, and other physical and manufacturing defect. The backing system shall have a minimum of 7% percent overall post consumer content, be 100% recyclable back into carpet meet FTC Guides for recycling and have third party certification for all claims. No wet adhesives are to be used. The carpet backing system shall have a moisture barrier. Use nontoxic carpet materials and treatments, reasonably non-allergenic, and free of other recognized health hazards. Conform to the following:

- a. Construction Type: Textured Level Loop.
- b. Construction: Tufted.
- c. Pile Fiber: Commercial branded Type 6,6 100% Continuous Filament Nylon.
- d. Yarn Face Weight: Maximum 20 oz/sq. yd per ASTM D 5848.
- e. Finished Pile Thickness: 0.068 inch average minimum.
- f. Pile Height: 0.177 average maximum.
- g. Pile Density: Minimum 10,000 oz/cu yd. Minimum per ASTM D 418.
- h. Weight Density: Minimum 188,000 per ASTM D 418.
- i. Tufts Per Inch: Minimum 9.5 Tufts per square inch.
- j. Backing Material: Closed Cell Vinyl.
- k. Primary Backing: Closed Cell Vinyl
- l. Secondary Backing: Sealant Vinyl
- m. Total Weight: 132.2oz/sq. yd. average minimum.
- n. Dye Method: Solution Dyed/Yarn Dyed
- o. Size: 24"x24"
- p. Color: Provide a minimum of 18 colors.

#### 2.1.3.4 Cushion

~~**a. Attached Cushion: Cushion shall be closed cell vinyl cushion with a microencapsulated takifier applied to 100% of the backing during manufacturing. Cushion shall be applied with a fusion coat 100% vinyl no urethane or laminated cushions will be allowed.**~~

**Attached Cushion : The attached cushion shall be chemically frothed polyurethane with minimum-weight of 18 oz/sq. yard, minimum density of 11 lb/cubic foot. Do not exceed the maximum ash content of 50 percent when tested in accordance with ASTM D297. Pass the accelerated-aging test in accordance with ASTM D1667 for the cushion.**

- b. Rebond Cushion: Shall be Class II, heavy traffic, 100 percent premium high density bonded cushion, with a density of 12 lbs/cu. foot and a minimum thickness of 7/16". The carpet cushion shall meet or exceed the following: Shall not crumble, deteriorate, or bottom out with age, shall meet or exceed the carpet manufacturer's specifications, shall be antimicrobial and non-allergenic, of unrestricted use, having outstanding thermal and sound insulation, having a moisture barrier, and be a triple thick laminate. Cushion components shall not be any larger than 1/2-inch.

2.1.3.5 Accessories: Accessories products and specifications shall be applicable to all installations in all sections of this contract as it applies.

- a. Adhesives: No wet adhesives for high performance and carpet tile products
  - i. Floor adhesive compatible with the carpet backing and floor surface. Type as recommended by the manufacturer. Water resistant, low VOC (not to exceed 10 milligrams per square meter per hour), non-staining type and complies with the flame spread rating required for the carpet installation.
  - ii. Wall Base Adhesive compatible with the wall base and wall surface. Type as recommended by the manufacturer.
- b. Seam Sealer: Type as recommended by the manufacturer.
- c. Commercial Carpet Edging, Transition Strip, Reducer Strip, Glue Down Carpet Edge, and Tile/Carpet Joiner: Aluminum, Polished Brass, and Vulcanized Rubber (PVC Free). A ¼” maximum height for all accessories. Provide all of the manufacturer’s colors for synthetic rubber compound products. Follow the manufacturer’s recommendation for use and application for specific carpet and flooring.
- d. Stair Nosing: Vulcanized Rubber, PVC Free, ¼” minimum thickness, Minimum thickness 0.125 inches, shall have a ribbed safety surface. Provide all of the manufacturer’s colors.
- e. Stair Tread: Heavy Duty Square Nose, Vulcanized Rubber, PVC Free, 3/16” minimum thickness, 1-3/8” minimum nose height, 12” minimum tread width, with abrasive ribbed design on tread. Provide all of the manufacturer’s colors.
- f. Vulcanized Rubber Wall Base: Conform to ASTM F 1861, Type TS, Group I, Style B Standard Shoe (Wall), PVC free, in approved color, and in low-gloss satin finish. Use flexible wall base to conform to the irregularities in walls, partitions, and floors. The back shall be ribbed and the top shall have top-lip design for a tight fit. Provide all ranges of the manufacturer’s colors. Colors shall be chosen by the customer from submitted manufacturers color samples as indicated on each project.
- g. Tack Strip: Water-resistant plywood strips with two or three rows of rust-resistant angular pins. For areas over 20-square feet, use tack strips with three rows of pins. Provide pins of the proper length to penetrate through the carpet backing but not so long as to be seen from the surface or to be a safety hazard. Provide tack strip 9/32 or 3/8 inch thick, suitable for the cushion thickness specified or as recommended by the carpet manufacturer.

#### 2.1.3.6 Flooring Preparation Products

- a. Embossing Leveler: For use to level and patch on resilient flooring. Type as recommended by the flooring manufacturer.
- b. Underlayment Leveler: For use on wood and on concrete for leveling and patching. Type as recommended by the flooring manufacturer.
- c. Cleaning Solvents: Low toxicity and flash point in excess of 10 degrees. Low VOC.
- d. Wood Floor Primer: Type as recommended by the flooring manufacturer. Low VOC.
- e. Liquid Floor Stripper: Type as recommended by the flooring manufacturer. Low VOC. For use when applying new flooring over existing resilient flooring.

### **PART 3 EXECUTION**

#### 3.1 EXAMINATION

3.1.1 Prior to start of work, the Contractor shall examine for moisture content, alkaline presence, and other conditions under which the carpet is to be installed. Perform a Anhydrous Calcium Chloride Moisture Vapor Transmission Test and provide test results to verify the amount moisture in new or existing slabs. Calcium Chloride shall be less than or equal to three (3) pounds per one thousand square feet in 24-hours. Alkalinity testing shall result in a pH range of 7-9. Notify the Contracting Officer in writing of conditions detrimental to proper completion of work. Do not proceed until unsatisfactory conditions have been corrected. Fill and finish all drilled or cored holes to the existing finish floor elevation.

3.1.1.2 Field verify all dimensions and other work conditions affecting the installation of the carpet and cushion.

3.1.1.3 Examine surfaces scheduled to receive carpet and cushion for defects that will adversely affect the proper installation. Do not proceed until unsatisfactory conditions are corrected.

3.1.1.4 The carpet covered in this specification is intended for end use applications that have a "Severe Use" classification. It is the Contractor's responsibility to provide only products compatible with adjacent materials assembly.

### 3.1.2 Preparation

3.1.2.1 Comply with CRI 104, Section, Section 7.3 "Site Conditions-Floor Preparations," and the carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet and cushion installation.

3.1.2.2 Clean floor surfaces of dust, dirt solvents, oil, grease, loose paint, wax, and other foreign substances. Clear away debris and scrape up cementitious deposits from surfaces to receive carpet. Allow for floor surfaces to dry thoroughly. Vacuum clean immediately before installation.

3.1.2.3 In all substrates and decks, repair minor holes, cracks, depressions, or rough areas using floor underlayment patch and leveler compound that is compatible with the adhesive to be used. Surface irregularities over 1/16" shall be adequately repaired to ensure a smooth, finished appearance and to prevent accelerated wear. Large patch areas shall be primed.

3.1.2.4 Whenever a powdery or porous surface is encountered, a primer compatible with the adhesive shall be used to provide a suitable surface for glue down installation. The Contractor shall consult with the flooring manufacturer for recommendations for installation when conditions such as these are encountered. The Contractor shall provide the Contracting Officer with the manufacturer's written recommendations.

3.1.2.5 Replace wood substrate determined to be unsuitable for carpet and cushion installation.

3.1.2.6 Re-nail or re-screw loose or cracked wood substrates.

3.1.2.7 Coordinate carpet installation with other construction and communication trades prior to carpet installation.

3.1.2.8 Sequence carpet installation with other work to minimize the possibility of damage and soiling of carpet during a construction period.

3.1.2.9 Maintain room temperature at a minimum of 60 degrees F for at least 24-hours prior to installation and relative humidity at approximately that at which the area is to be maintained.

### 3.1.3 Carpet Installation

3.1.3 Perform installation in accordance with the manufacturer's instruction, except where more stringent requirements are shown or specified, and except where project conditions require extra precautions or provisions to ensure satisfactory performance of work. Installed carpet must be smooth, uniform, and secure with a minimum of seams.

3.1.3.2 Comply with the carpet instructions for direction of carpet. Unless otherwise specified on drawings, align pattern and pile in the same direction, and parallel to the centerline of the area or room. At all seams shall align with and match the carpet pattern.

3.1.3.3 Extend carpet under open bottom obstructions and under removable flanges and furnishings, and in to alcoves and closets of each space. Existing systems furniture shall be raised or removed to accommodate continuous carpet installation.

3.1.3.4 Provide cutout where required. Apply sealer along the edge of the carpet where the face yarn goes back in. Immediately remove excess sealer from the face of the level loop or pile.

3.1.3.5 Follow the carpet manufacturer's instruction for cutting carpet, using tools designed to cut the type of carpet and cushion materials being installed.

3.1.3.6 At door openings, orient the carpet seam to be perpendicular to traffic direction; the doorway seam shall be located directly underneath the center of the door when closed.

3.1.3.7 Carpet Seams: Make uniform, unnoticeable, and permanent seams. Treat all joining edges, regardless of seaming method, with a seam adhesive unless manufacturer specifies otherwise. Seams must have a minimum seaming strength of 100 pounds per inch and must be capable of withstanding all carpet cleaning processes.

3.1.3.8 Carpet shall be free from movement when subject to traffic.

3.1.3.9 Commercial Carpet Edging, Transition Strip, Reducer Strip, Glue Down Carpet Edge, and Tile/Carpet Joiner: Finish carpet edges meeting hard surface flooring with appropriate edging and strips. Install according to carpet manufacturer's installation instructions.

3.1.3.10 Stair Nosing and Stair Tread: Finish stairs with the appropriate nosing and tread. Install in accordance with the manufacturer's installation instructions.

3.1.4 Glue Down Installation: Comply with CRI 104, Section 9 "Direct Glue Down Installation" or Section 10 "Double Glue Down Instruction."

3.1.4.1 Before applying adhesive to the substrate, pre-fit the carpet in the area where it is to be installed. Where cutting is necessary, provide properly prepared, straight, and unfrayed edges.

3.1.4.2 Apply a full spread of adhesive in an even layer to the substrate, using a notched trowel as recommended by the manufacture. Follow the MSDS instructions for proper ventilation.

3.1.4.3 Install pre-fitted carpet; adjust for proper seam edges, and wall vertical obstruction alignment.

3.1.4.4 Stretch the carpet tightly over the substrate, so that the carpet lies flat, so that it is uniformly smooth, and free of bulges and air pockets. Broom or roll to ensure bond.

3.1.4.5 Apply seaming cement or weld depending on manufactures recommendations.

3.1.4.6 Install edge strips at the exposed carpet edges, unless indicated otherwise. Provide secure attachment to the substrate.

3.1.4.7 Immediately remove adhesive from the surface of the carpet by methods that will not damage the carpet.

3.1.5 Miscellaneous Installation, Stairway Carpeting: Comply with CRI 104, Section 13 "Carpet On Stairs" and install in accordance with the carpet manufacturer's installation instructions.

3.1.6 Modular Carpet: Comply with CRI 104, Section 14 “Carpet Modules” and install in accordance with the carpet manufacturer’s installation instructions.

3.1.6.1 Comply with Section 2.1.4 “Glue Down Installation, General” of Section 09680 as applicable to the installation of modular carpet.

3.1.7 Tackless Method with Separate Cushion

3.1.7.1 Install in accordance with the carpet manufacturer's printed instructions. Fasten tack strips to the substrate by the most appropriate method to give permanent holding qualities. Lay cushion in the largest possible lengths and widths using the minimum number of sections. Lay cushion flat, without bubbles or wrinkles. Bond cushion to concrete or other hard surfaces or staple to wood floors. Lay out the cushion so that seams do not fall directly under the carpet seams. Tape cushion seams for the entire length with minimum 2-inch wide cushion tape.

3.1.8 Minor Repairs and Contractor Initiated Damage: Repair all wall surfaces, whether pre-existing or inflicted by the demolition process. The Contractor shall be held responsible for all repairs they initiated during the demolition process at no cost to the Government. Prime, texture and paint surfaces to match the existing wall surface prior to rubber wall base installation. The Contractor shall include in the wall base removal ELIN the costs to make minor repairs to wall surfaces. If the Contractor points out during the site verification that the wall surface condition is damaged beyond minor repair and the Contracting Officer agrees, the Contractor will then be directed to submit a proposal to make such repairs to the Contracting Officer. The Contracting Officer shall review the Contractor’s proposal to determine that it is fair and reasonable.

3.1.8.1 A minor repair is considered as pre-existing surface damage on the surfaces to be carpeted. The minor repair includes holes and tears.

3.1.8.2 Install rubber wall base after the completion of carpet work. Use the recommended adhesive as specified by the manufacturer.

3.1.8.3 The Government may order MDF baseboard. The Contractor will be directed to submit a proposal for labor and materials to install the MDF baseboard.

- a. The Contractor shall provide a qualified finish carpenter to perform such work. The installation shall be performed to industry standards. Jointing and miter cuts shall be true and accurate. The base board shall fit together at the joints and miters showing no gaps. Prime and paint all base board before installation. Fill in fastener indentations and any scarring. Touch up all areas with touch up paint to make ready for inspection.

## 3.2 CLEANING AND PROTECTION UPON COMPLETION

3.2.1 Remove and dispose of excess carpet scraps, cushion scraps, and debris. Do not stock pile any these waste materials on any job site. All excess carpet scraps, cushion scraps, and debris shall be hauled to a recycle facility.

3.2.2 Immediately remove spots and smears of excessive adhesive, seam sealer, and other surface blemishes from the carpet and wall surfaces using a cleaning solvent recommended by the manufacturer.

3.2.3 Remove loose pieces of face yarn that protrude from carpet surface. Clip with scissors as necessary.

3.2.4 Thoroughly vacuum all carpet surfaces with a commercial quality vacuum cleaner with a face beater element.

3.2.5 Protect the installed carpet by complying with CRI 104, Section 16 “Protection of Indoor Installations.”

3.2.6 As required to protect against soiling and damage, protect the installed carpet with a heavy, non-staining building paper. Do not use a moisture barrier such as a plastic film. Maintain protection until acceptance by the Government.

3.2.7 Submit instructions to the Contracting Officer's representative and customer that state to not wet clean any glue down carpet for 60-calendar days after installation is completed.

3.2.8 In accordance with the manufacturer's instruction to allow the glue to dry, do not allow foot traffic or place furniture on glue down carpet. Notify the Contracting Officer's representative and customer of the manufacturer's instruction before scheduling the carpet replacement.

3.2.9 Advise the customer verbally and submit a carpet manufacturer's carpet maintenance instructions to the Contracting Officer's representative and customer.

3.2.10 Demolished flooring is addressed in specified in Section 01 74 19 "CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT" and Section 02 41 00 "SITE DEMOLITION."

### 3.3 WARRANTY

1.3.1 Warranties shall cover all labor and materials, including labor and installation costs involved to replace defective product or workmanship.

1.3.2 General Warranty: Special warranties specified in the Section shall not deprive the Government of other rights the Government may have under the provisions of the Contract Documents and shall be in addition to, and run concurrent with other warranties made by the Contractor under requirements of the Contract documents.

1.3.3 Special Carpet/Carpet Tile Warranty: A written warranty, signed by the carpet manufacturer agreeing to replace carpet that does not comply with the requirements or that fails within the specified warranty period. Failures include, but are not limited to, more than 10 percent loss of fiber face, edge raveling, snags, runs, and delamination, for a period of 25 years non-pro-rated on high performance carpet and 15 years non-prorated on carpet tile.

1.3.4 Special Carpet Cushion Warranty: A written warranty, signed by the carpet cushion manufacturer agreeing to replace the cushion that does not comply with the requirements or that fails within the specified warranty period. Failures include, but are not limited to, permanent indentation or compression.

1.3.5 Manufacturer Warranty Period: For carpet 10 year warranty against edge ravel and delamination non-prorated; Modular carpet 15 year non-prorated warranty; and high performance carpet a 25 year non pro-rated warranty from the date of Substantial Completion.

1.3.6 Contractor's Installation Warranty: A written warranty for the Base Year and sequential awarded Option Years, signed by the Contractor agreeing to correct faulty workmanship.

1.3.6.1 The warranty period shall be one-year from the substantial completion date.

-- End of Section --

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**ATTACHMENT 1  
CAMP PENDLETON MAP**



|              |                                |   |            |          |
|--------------|--------------------------------|---|------------|----------|
| DRAWING NO   | LOCATION: Base Map             | SCALE   | PLANNER    | APPROVED |
| SP-1         | DESCRIPTION: Flooring Contract | NA  | Scott Tant |          |
| DATE: 4.2013 |                                | PUBLIC WORKS OFFICE<br>FACILITIES SUPPORT CONTRACT DIVISION<br>PLANNING/TECHNICAL BRANCH<br>MCB CAMP PENDLETON, CA 92055-5013 |            |          |



|                                |
|--------------------------------|
| <b>ATTACHMENT 3</b>            |
| <b>SUBMITTAL REGISTER FORM</b> |

Provided as a separate attachment.



|                       |  |   |
|-----------------------|--|---|
| Schedule Activity No. | DEFINABLE FEATURE OF WORK AND LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED | <input type="checkbox"/> SAFETY REQUIREMENTS HAVE BEEN MET. |
|                       |  |   |
|                       |  |   |

|   |             |  |
|---|-------------|--|
| EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB (INDICATE SCHEDULE ACTIVITY NUMBER) |             |  |
| Schedule Activity No.   | Submittal # | Definable Feature of Work and Description of Equipment/Material Received |
|   |             |  |
|   |             |  |
|   |             |  |
|   |             |  |

|   |       |  |            |
|---|-------|--|------------|
| CONSTRUCTION AND PLANT EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED AND SCHEDULE ACTIVITY NUMBER. |       |  |            |
| Schedule Activity No.   | Owner | Definable Feature of Work and Description of Construction Equipment Used Today (incl Make and Model) | Hours Used |
|   |       |  |            |
|   |       |  |            |
|   |       |  |            |
|   |       |  |            |
|   |       |  |            |
|   |       |  |            |
|   |       |  |            |

|                       |                                       |
|-----------------------|---------------------------------------|
| Schedule Activity No. | DEFINABLE FEATURE OF WORK AND REMARKS |
|                       |                                       |
|                       |                                       |
|                       |                                       |
|                       |                                       |

\_\_\_\_\_  
CONTRACTOR/SUPERINTENDENT                      DATE

|                                |                    |           |
|--------------------------------|--------------------|-----------|
| <b>CONTRACTOR DAILY REPORT</b> |                    | DATE      |
| (CONTINUATION SHEET)           |                    |           |
| CONTRACT NO                    | TITLE AND LOCATION | REPORT NO |

**WORK PERFORMED TODAY**

| Schedule Activity No. | DEFINABLE FEATURE OF WORK, WORK LOCATION AND DESCRIPTION | EMPLOYER | NUMBER | TRADE | HRS |
|-----------------------|--|----------|--------|-------|-----|
|                       |  |          |        |       |     |
|                       |  |          |        |       |     |



|  |  |
|--|--|
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|  |  |
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|  |  |
|  |  |

INCLUDE ALL PERSONNEL WORK HOURS IN THE WORK PERFORMED SECTION ON THIS SHEET  
INTO THE FRONT CONTRACTOR PRODUCTION REPORT

**ATTACHMENT 5**

**CONTRACTOR SIGNIFICANT INCIDENT REPORT**

**Contractor Significant Incident Report (CSIR-1)**

Page 1 of 4

|   |   |                                     |  |
|---|---|-------------------------------------|--|
| <b>Report Date:</b>   | <b>Contracting Activity/ROICC Office</b>  |                                     |  |
| <b>1. Accident Classification:</b>  |   |                                     |  |
| <input type="checkbox"/> Injury <input type="checkbox"/> Illness <input type="checkbox"/> Fatality <input type="checkbox"/> Property Damage <input type="checkbox"/> Procedural Issues <input type="checkbox"/> Environmental                       |   |                                     |  |
| Involving:  |   |                                     |  |
| <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Electrical <input type="checkbox"/> Equip/Motor Vehicle/<br>Material Handling <input type="checkbox"/> Diving <input type="checkbox"/> Falls                                  |   |                                     |  |
| <input type="checkbox"/> Confined Space <input type="checkbox"/> Crane/Rigging <input type="checkbox"/> Trenching/Entrapment <input type="checkbox"/> Fire <input type="checkbox"/> Other   |   |                                     |  |
| <input type="checkbox"/> Waterfront Operations <input type="checkbox"/> Demolition/Renovation   |   |                                     |  |
| <b>2. Personal Data:</b>  |   |                                     |  |
| A. Name (Last, First, M.)   |   | B. Age                              | C. Sex   |
|   |   |                                     | D. Social Security Number  |
| E. Job Description/Title  |   | F. Employed By                      | G. Supervisor's Name   |
| <b>3. Witness Data (Attach Witness Summary Statements to Report):</b>   |   |                                     |  |
| A. Name (Last, First, M.)   |   | B. Age                              | C. Sex   |
|   |   |                                     |  |
| D. Job Description/Title  |   | E. Employed By                      |  |
|   |   |                                     |  |
| <b>4. General Information:</b>  |   |                                     |  |
| A. Date of Accident<br>(Month/Day/Year)   | B. Time of Accident                       | C. Exact Location of Accident       | D. Type of Construction Equipment<br>(Make, Model, Serial Number, Vin #) |
|   |   |                                     |  |
| E. Contract Number/Title  | F. Construction Activity SIC              | G. Hazardous Material Spill/Release |  |
|   |   |                                     |  |
| H. Type of Contract   | I. Contractor's Name/Address/Phone Number |                                     |  |
| <input type="checkbox"/> Construction<br><input type="checkbox"/> A/E<br><input type="checkbox"/> Service<br><input type="checkbox"/> RAC<br><input type="checkbox"/> CLEAN<br><input type="checkbox"/> JOC<br><input type="checkbox"/> OTHER _____ | (1) Prime:                                |                                     |  |
|   | (2) Sub:                                  |                                     |  |
| J. Safety Manager's Name  | Phone #                                   | K. Insurance Carrier                |  |
|   |   |                                     |  |
| (1) Prime:  | (2) Sub:                                  | (1) Prime:                          | (2) Sub:   |
|   |   |                                     |  |



**Environmental Factors** - Did heat, cold, dust, sun, glare, etc., contribute to the accident?

**Chemical & Physical Agent Factors** - Did exposure to chemical agents, such as dust, fumes, mists, vapors or physical agents such as noise, radiation, etc., contribute to the accident?

**Office Factors** - Did office setting such as lifting office furniture, carrying, stopping, etc., contribute to the accident?

**Support Factors** - Were inappropriate tools/resources provided to properly perform the activity task?

**Personal Protective Equipment** - Did the improper selection use, or maintenance of personal protective equipment contribute to the accident?

**Drugs/Alcohol** - In your opinion, were drugs or alcohol a factor?

**Activity Hazard Analysis** - Was the lack of an adequate (IAW EM 385-1-1 Sec 01.A.09) Activity Hazard Analysis a contributing factor?  
- Was it site specific and address the type of work/operations performed when the mishap occurred?

**Management** - Did the lack of adequate supervision contribute to the accident?

- Was inadequate information provided at pre-con meeting?

**8. Training:**

A. Was/were person(s) trained to perform activity/task?

B. Type of training?

C. Date of most recent formal training? / /

D. List topics discussed

**9. Fully Explain What Allowed or Caused The Accident, Include Direct and Indirect Causes:**

A. Direct Cause

B. Indirect Cause

C. Action(s) taken to prevent re occurrences or provide on-going corrective actions.

D. Corrective Action Dates

(1) Beginning (Mo/Da/Yr)    /    /

(2) Anticipated Completion Date (Mo/Da/Yr)    /    /

---

**10. OSHA**

|                                     |                                    |
|-------------------------------------|------------------------------------|
| A. Date OSHA was notified    /    / | C. Date of OSHA Citation    /    / |
| B. Date OSHA Investigated    /    / | D. \$ Amount of Penalties:         |

---

**11. Report Preparer**

Print Name & Title of Supervisor Completing Report

Signature: \_\_\_\_\_

Date (Mo/Da/Yr) \_\_\_\_\_

---

**12. Management Review (Contracting Officer)**

|                                      |   |  |
|--------------------------------------|---|--|
| A. <input type="checkbox"/> Accepted | B. <input type="checkbox"/> Amendments Required | C. <input type="checkbox"/> Comments (include program improvements required for your Command. NAVFACHQ Construction Safety Program and EM 385-1-1) |
|--------------------------------------|---|--|

D. Print Name & Title of Official Completing Report

Signature: \_\_\_\_\_

Date: (Mo/Da/Yr) \_\_\_\_\_

---

**13. Safety And Occupational Health Officer Review**

|                                    |  |   |
|------------------------------------|--|---|
| A. <input type="checkbox"/> Concur | B. <input type="checkbox"/> Non Concur | C. <input type="checkbox"/> Additional Actions/Comments |
|------------------------------------|--|---|

D. Print Name & title of Safety Personnel Reviewing

Signature: \_\_\_\_\_

Date (Mo/Da/Yr) \_\_\_\_\_

**ATTACHMENT 6**

**CONTRACT DISCREPANCY REPORT**

**Note:** The Contract Discrepancy Report will be issued by the Contracting Officer.

|  |   |                    |
|--|---|--------------------|
| <b>CONTRACT DISCREPANCY REPORT</b>   |   | 1. CONTRACT NUMBER |
| <b>GOVERNMENT ACTION</b>   |   |                    |
| 2. TO (Contractor and Manager Name)  | 3. FROM (Name of Government Representative) |                    |
| 4. DISCREPANCY OR PROBLEM (include Spec Item number & Performance Assessment Level)<br>Spec Item No: _____<br>Assessment Level 1 <input type="checkbox"/> Assessment Level 2 <input type="checkbox"/> Assessment Level 3 <input type="checkbox"/><br><br><input type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE |   |                    |
| 5. SIGNATURE OF CONTRACTING OFFICER  | 6. DATE                                     |                    |
| 7. SIGNATURE OF CONTRACTOR<br><br>(print name & sign – Return back to Contracting Officer within 24 hours)   | 8. DATE                                     |                    |
| <b>CONTRACTOR ACTION</b>   |   |                    |
| 9. TO (Contracting Officer)  | 10. FROM (Contractor)                       |                    |
| 11. CONTRACTOR RESPONSE (Cause, corrective actions to prevent recurrence. Attach continuation sheet if necessary.)   |   |                    |
| 12. SIGNATURE OF CONTRACTOR REPRESENTATIVE<br><br>(print name & sign)  | 13. DATE                                    |                    |
| <b>GOVERNMENT CLOSE OUT</b>  |   |                    |
| 14. GOVERNMENT EVALUATION (Acceptance, partial acceptance. Attach continuation sheet if necessary.)<br><br><input type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE   |   |                    |
| 15. GOVERNMENT ACTIONS (Payment deduction, cure notice, show cause, other.)  |   |                    |

|                                       |          |
|---------------------------------------|----------|
| 16. SIGNATURE OF GOVERNMENT EVALUATOR | 17. DATE |
| 18. SIGNATURE OF CONTRACTING OFFICER  | 19. DATE |

**ATTACHMENT 7**

**CONTRACT DISCREPANCY NOTICE**

**Note:** The Contract Discrepancy Notice will be issued by the QAE.

**DISCREPANCY NOTICE (Commercial Contract)**

MCBCP-11014/6 (9-82)

|                                       |                    |
|---------------------------------------|--------------------|
| PERFORMANCE ASSESSMENT REPRESENTATIVE | CONTRACT NUMBER    |
| DISCREPANCY OR PROBLEM                |                    |
| INSPECTOR                             | INSPECTION DATE    |
| INSPECTOR                             | RE-INSPECTION DATE |
| CONTRACTOR'S SIGNATURE                | DATE               |
| CONTRACTOR'S COMMENTS                 |                    |
|                                       |                    |

**ATTACHMENT 8**

**LAYDOWN LOT RULES**

**STANDARD OPERATING PROCEDURES FOR THE 26 AREA LAYDOWN LOT**

1. The Contractor shall submit a written request for the use of lot in the Laydown Lot.
2. The Contractor is responsible for installing a minimum 8-foot high fence with lockable gates. The Government assumes no liability for unsecured lots and loss of property.
3. The Contractor shall conspicuously place a minimum of a 2-foot by 2-foot sign with the name of the company, and business and emergency contact phone numbers on the fence and office trailer.
4. Once a lot is issued to the Contractor, it is their responsibility to clean and maintain the lot free of debris and vegetation.
5. The Contractor shall keep all stored material and equipment in a neat and orderly fashion.
6. Contractor owned or leased office trailers shall be kept in good repair and painted.
7. Office trailers shall be anchored in accordance with seismic codes.
8. The Contractor shall provide sanitary facilities for their employees. There are no sewer hook-ups available. Domestic water may or may not be available.
9. The Contractor shall be responsible for providing electrical conductors for the service drop, weatherheads, grounding rod, and all necessary electrical components to receive electrical power for their office trailer. A request is required for the Base High Voltage Shop to make the service drop and power line connection.
10. The Contractor is responsible for obtaining any forms of communication and IT to their office trailer.
11. Within 30 days after completion of the contract, the Contractor shall be responsible for disconnecting all utilities to their office trailer(s) and other facilities; removing all facilities, equipment, and materials; and cleaning the lot free of debris and vegetation.
12. Failure to comply with the listed rules, additional direction, or creating a nuisance may be cause for immediate eviction. Upon receiving an eviction notification, the Contractor has five working days to vacate the premises. If the premises are not vacated within the time frame given, the Government will have the facilities, equipment and material removed at the Contractor's expense.

I have read the above and agree to abide by the rules herein.

\_\_\_\_\_  
Contractor's Signature

\_\_\_\_\_  
Date

**ATTACHMENT 9**

**INSTRUCTION FOR HAZARDOUS & NON-HAZARDOUS WASTE MANIFEST**

Assistant Chief of Staff Environmental Security  
P.O. Box 555008  
Camp Pendleton, Ca 92055

**INSTRUCTION FOR HAZARDOUS & NON-HAZARDOUS WASTE MANIFEST**

A representative from the Office of the Assistant Chief of Staff, Environmental Security, must sign all hazardous and non-hazardous waste manifests. A representative from the Hazardous Waste Branch is the only person (s) authorized to sign manifest for waste departing Camp Pendleton. The Hazardous Waste Branch is located in Bldg. 2282.

Please include the following information on your manifest to avoid signing delays, ensure compliance and to ensure the manifest is returned to the generator promptly:

1. Generator's Name and Mailing Address. The generator address is AC/S Environmental Security P.O. Box 555008, Camp Pendleton, CA 92055-5008.
2. Generator's Phone. (760) 725-5617
3. Generator's US EPA ID No. Camp Pendleton US EPA ID No. CA2170023533
4. State Generator ID. HYHQ36020982
5. Manifest Document No. Transporter/Company will assign this info.
6. Special Handling Instructions and Additional Information. Please include a Project Manager; project number or project name that generated the shipment, ensure the same information is written on the waste profile associated with the shipment.
7. Prior to signing any manifest, the operator or project manager must present a copy of the hazardous waste, non-hazardous waste profile, analytical or land disposal certification if applicable to the HW Branch. If the job will be performed over an extended period, the Project Manager may deliver a copy of the analytical, profile or LDR to the hazardous waste branch to keep on file prior to transporter arriving for signature. The vehicle operator will sign block 17 prior to receiving generator signature. Please have the vehicle operator accompany all manifest to the Hazardous Waste Branch for signature, for an exception, please contact the Branch Head at (760) 725-4375.

Please refer to California Code of Regulations, Title 22, Section 66262.23 for use of the manifest. Any questions concerning this matter, please contact the hazardous waste branch at 725-4375.



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| <b>ATTACHMENT 11</b> |
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|   |
|---|
| <b>CARPET AND RUG INSTITUTE MANUAL CRI-104 - 2011</b> |
|---|

Provided as a separate attachment.

|                      |
|----------------------|
| <b>ATTACHMENT 12</b> |
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|                                 |
|---------------------------------|
| <b>SAFETY INSPECTION REPORT</b> |
|---------------------------------|

Provided as a separate attachment.

|                      |
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| <b>ATTACHMENT 13</b> |
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|                                  |
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| <b>QUALITY CONTROL CHECKLIST</b> |
|----------------------------------|

Provided as a separate attachment.

|                        |
|------------------------|
| <b>ATTACHMENT B-01</b> |
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|                     |
|---------------------|
| <b>BID SCHEDULE</b> |
|---------------------|

Provided as a separate attachment.

THE END