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USACE / NAVFAC / AFCEC / NASA UFGS-01 35 13.05 20 (November 2007)  
Change 1 - 09/15  
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Preparing Activity: NAVFAC Superseding  
UFGS-01 35 13.05 20 (July 2006)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

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SECTION 01 35 13.05 20

SPECIAL PROJECT PROCEDURES FOR DESIGN-BUILD  
11/07

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NOTE: This guide specification covers the requirements for special procedures for airfields, heliports, harbors and radiological protection.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specifications sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

If the RFP Preparer is using the Specsintact version of the UFGS section, this guide specification includes tailoring options for NAVFAC regional requirements. Selection or deselection of a tailoring option will include or exclude that option in the section, but editing of the resulting section to fit the project is still required.

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PART 1 GENERAL

1.1 SUBMITTALS

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NOTE: Review Submittal Description (SD) definitions in Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES and 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Keep

submittals to the minimum required for quality control.

The Guide Specification technical editors have designated those items that require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item, if the submittal is sufficiently important or complex in context of the project.

An "S" following a submittal item indicates that the submittal is required for the Sustainability eNotebook to fulfill federally mandated sustainable requirements in accordance with Section 01 33 29 SUSTAINABILITY REPORTING FOR DESIGN-BUILD. Coordinate all Part 2 and Part 4 Specification Sections with 01 33 29.05 20 SUSTAINABILITY REPORTING FOR DESIGN-BUILD.

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Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance with Section 01 33 29.05 20 SUSTAINABILITY REPORTING FOR DESIGN-BUILD. Submit the following in accordance with Section 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES and 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

[Watercraft list; G

]SD-04 Samples

[Model Unit; G

]PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

[3.1 HAZARDS TO [AIRFIELD][HELIPORT] OPERATION

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NOTE: Include these paragraphs in projects where work will occur on or near aircraft runways, taxiways, or similar aircraft operational facilities. Use the term "landing strip" when dealing with heliports. Use the term "runway" when dealing with airplanes. Use the term "Operations Officer," except as directed otherwise.

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In addition to "DFARS 252.236-7005, Airfield Safety Precautions," the following paragraphs apply.

#### 3.1.1 Work in Proximity to [Runways] [Landing Strips]

Accomplish all construction work on[ the runways, taxiways, and parking aprons and in the end zones of the runways and 23 m (75 feet) to each side of the runways and taxiways][ the landing strip, 23 m (75 feet) to each side thereof, and on the taxiways and parking aprons] with extreme care regarding the operation of aircraft. Cooperate closely, and coordinate with[ the Operations Officer and] the Contracting Officer. Park equipment in an area designated by the Contracting Officer. Under no circumstances is equipment allowed to be parked overnight or for any extended period of time in the proximity of the [runways or taxiways][landing strip]. Leave no material in areas where extreme care is to be taken regarding the operation of aircraft.

#### 3.1.2 Schedule of Work/Aircraft Operating Schedules

Schedule work to conform to aircraft operating schedules. The Government will exert every effort to schedule aircraft operations so as to permit the maximum amount of time for the Contractor's activities; however, in the event of emergency, intense operational demands, adverse wind conditions, and other such unforeseen difficulties, the Contractor must discontinue operations at the specified locations in the aircraft operational area for the safety of the Contractor and military personnel and Government property. Submit a schedule of the work to the Contracting Officer[ for transmittal to the Operations Officer] describing the work to be accomplished; the location of the work, noting distances from the ends of [runways, taxiways] [landing strips] and buildings and other structures as necessary; and dates and hours during which the work is to be accomplished. Keep the approved schedule of work current, and notify the Contracting Officer of any changes prior to beginning each day's work.

#### 3.1.3 Daytime Markings

During daylight, mark stationary and mobile equipment with international orange and white checkered flags, mark the material, and work with yellow flags.

#### 3.1.4 Nighttime Markings

During nighttime, which begins 2 hours before sundown and ends 2 hours after sunrise, mark stationary and mobile equipment and material, and work with red lanterns. Where the [Operations Officer][Contracting Officer] determines that the red lanterns may confuse pilots approaching for landings, the [Operations Officer][Contracting Officer] may direct that the red lanterns be left off or that the color of the globes be changed.

#### [3.1.5 Excavation

Open only those trenches for which material is on hand and ready for placing therein. As soon as possible after the material has been placed and work approved, backfill and compact the trenches as specified.

#### ]3.1.6 Contractor Safety Precautions

The contractor is advised that aircraft operations will produce extremely high noise levels and will induce vibrations in pavements, structures, and equipment in the vicinity, and may result in high velocity flying debris in the area. The contractor is responsible for providing all necessary ear protective and other safety devices for his personnel, for insuring protection of his equipment, and for scheduling the work to eliminate hazards to his personnel and equipment and to prevent damage to work performed by him.

]3.1.7 Base Civil Engineering (BCE) Work Clearance Request

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**NOTE: Include for Air Force projects.**  
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Obtain an approved BCE Work Clearance Request, AF Form 103, prior to the start of excavation, digging work, or work that disrupts aircraft or vehicular traffic flow, base utility services, fire and intrusion alarm system, or routine activities of the Activity.

]3.1.8 Radio Contact

Provide necessary battery powered portable radios, including one radio for the tower. During work within the landing area, have an operator (who speaks fluent English) available for radio contact with the tower at all times. Radio frequency must be approved by the tower.

]3.2 HARBOR WATERWAYS

In addition to "DFARS 252.236-7002, Obstruction of Navigable Waterways," obtain from the [Operations Officer at the Naval Base, Pearl Harbor via the][\_\_\_\_\_] Contracting Officer, permission to use [Pearl Harbor][\_\_\_\_\_] waterways and the regulations and directives governing such usage. Submit a [watercraft list](#) with a description of crafts, including sizes, types, numbers and boat crew for approval.

[3.2.1 Hazards to Navigation

Maintain complete control of the movement of floating equipment and material. Loose floating equipment and material are not permitted. Keep in readiness at all times a powered craft capable of moving, securing and disposing of floating equipment which may get loose and become a hazard to navigation.

]3.2.2 Submarine Cables or Underwater Utilities

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**NOTE: Include whenever dredging and submarine cables or underwater utilities involved.**  
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Physically locate submarine cables or underwater utilities as indicated prior to performance of work.

]3.2.3 RIMPAC Operational Exercises

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**NOTE: Use when Pearl Harbor waterways involved.**

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Due to the RIMPAC exercises conducted every even numbered years, the Contractor must anticipate delays and disruption in construction activities for a period of 60 consecutive calendar days during the contract. Disruption may range from complete shutdown of construction activity for a prolonged period of time or periodic short term shutdown of less than a full day, but in no event will all such shutdowns in the aggregate exceed 60 calendar days per calendar year. This affected period is anticipated between 1 April and 31 July of every even numbered year. Bidders must take into consideration such delays when preparing their bids.

]3.2.4 Annual Pearl Harbor "Hydrofest"

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**NOTE: Use when Pearl Harbor waterways involved.**

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The annual Pearl Harbor "Hydrofest" activities will prevent access to the waterways for a 2-week period during October or November. Bidders must take into consideration such delays when preparing their bid.

]3.2.5 December 7, 1941 Commemorative Ceremonies

To minimize disturbances during Pearl Harbor's December 7, 1941 Commemorative Ceremonies, the Contractor must shut down all construction activities on the day that ceremonies are held.

]]3.3 MODEL UNIT

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**NOTE: Use the following paragraphs on projects with repetitious unit construction. Require the Contractor to complete a model unit to various levels, and have the materials and workmanship approved prior to proceeding with the remainder of the project. Examples of such projects are BEQ's, BOQ's, and family housing units, both renovations and new construction.**

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Prior to placement of material orders for components of the [BEQ living suites][BOQ living suites][family housing units][\_\_\_\_\_] and the installation of those components throughout the project, the Contractor must complete the construction of the components of the model unit, and gain the approval of the Contracting Officer for the materials and workmanship therein.

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**NOTE: Edit the following paragraph to describe the extents of the model unit(s), and delineate whether each is a housing unit building, or a multiple resident living unit within a multi-unit building.**

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**NOTE: Choose housing unit and the last bracketed option in the paragraph for family housing projects.**

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3.3.1 Model Unit Description

The model unit must be made up of enough [living suites consisting of two bedrooms and an interconnecting bathroom][single family housing units][\_\_\_\_\_] to show all of the different levels of completion required below. [The model unit must have enough [suites][housing units] to show all level of completion simultaneously[, except for foundation and floor slab levels which are approved by the Contracting Officer and covered by following levels]. ]The model unit must be [living suites][family housing units][\_\_\_\_\_] constructed at the location agreed upon with the Contracting Officer and [a part of the permanent structure as indicated] [a temporary structure constructed to full scale at the location indicated, and demolished at the completion of the contract].

3.3.2 Model Unit Requirements

The construction of the model unit must adhere to the following requirements:

- a. Materials provided in model unit must be those actually approved in submittals. The QC Manager and Organization must be in place to approve and process submittals in accordance with Sections 01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES and 01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES.
- b. The Contractor must provide all temporary utilities and climate control necessary to construct, inspect, approve, and maintain the model unit.
- c. Prior to completion and approval of the model unit, and with written permission to start from the Contracting Officer, the Contractor may perform general sitework and run major utility lines for the rest of the project.

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**NOTE: Include the next item when construction time is limited. Confirm with Contracting Officer and Activity User that they can consistently inspect and approve the model unit's different levels of completion before adding this option.**

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- [d. As each model unit's level of completion is approved by the Contracting Officer, construction of that level's components throughout the remainder of the project may proceed.

]3.3.3 Model Unit Levels of Completion

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**NOTE: Choose one of the three model unit completion paragraphs below and confirm the selection with the Using Activity and Contracting Officer.**

**The first bracketed option requiring the model unit to be complete before starting the construction of the facilities should only be used when delivery time**

of the facility is not critical. This option will delay the construction of the facility(s) until the model unit is constructed and approved.

The second bracketed option using two levels of completion is most effective on BEQ construction but can be used on housing.

The third bracketed option using multiple levels of completion should be used when time is a critical issue, especially on housing. This option sets incremental approval of multiple levels allowing contractor to proceed quickly into the construction of the facility(s).

In the third option verify with the Contracting Officer the number of approval stages desired. In this option, levels may be combined if confirmed with Contracting Officer.

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[The completed model unit must be exhibited for approval. Upon completion, the model unit must be available to the Government for a period of fifteen (15) working days for inspection after notification is received by Contracting Officer.

] [Model unit must be exhibited and approved at the following levels of completion:

- a. Level 1 (Pre-Finished Level) - Model unit construction within a completed building exterior must exhibit plumbing, ductwork, electrical locations, exposed framing, and windows. Walls and floors must be unfinished but ready for application of final finish. Upon completion of this milestone, model unit must be available to the Government for a period of five (5) working days for inspection.
- b. Level 2 (Finished Level) - Model unit construction must exhibit all materials, completely finished as specified, including fixtures, wall and floor finishes, cabinets, and shelving. Upon completion of this milestone, the model unit must be available to the government for a period of fifteen (15) working days for inspection.

] [Model unit must be exhibited and approved at the following [7] [\_\_\_\_\_] levels of completion. For inspections of model unit, level 1 must each be available to the government for a period of twenty-eight (28) calendar days, and level 2 through 7 must each be available to the government for a period of ten (10) calendar days.

- a. Level 1 (Foundation & Floor Slab Level) - Model unit construction must exhibit treatment of earth excavation, testing of underslab mechanical piping, earth compaction, assembly and support of concrete reinforcing, technique of concrete movement and placement, framing of foundation steps, placement of insulation, final exposed concrete finished surface treatment, location outlines of all walls, all slab penetrations, and structural support points.

- b. Level 2 (Framing Level) - Model unit construction must exhibit all load bearing and non-load bearing framing, sheathing, anchorage for exterior shell materials, and must be framed out ready for trim.
- c. Level 3 (Exterior Shell Level) - Model unit exterior construction must exhibit all exterior finishes, windows and doors with temporary hardware, caulking, sealant, sheathing paper, wall ties, locations of mechanical equipment, roofing, louvers, vents and trim.
- d. Level 4 (Plumbing, Mechanical and Electrical rough-in Level) - Model unit construction must exhibit electrical conduit and box location for switches, outlets fixtures, cable and data collection. This level's model unit construction must also exhibit ductwork, built-in plumbing fixtures, plumbing piping, and water pressure test of all plumbing pipe.
- e. Level 5 (Interior Finishes-rough Level) - Model unit construction must exhibit non-veneer plaster, unspackled and uncaulked wall and ceiling finishes, insulation, interior doors, final locations of all outlets and fixtures.
- f. Level 6 (Interior Finishes & Fixtures-final Level) - Model unit construction must exhibit final interior finishes, veneer plaster, painting, caulking, built-in shelving, cabinetwork, cabinet supported sinks, final door hardware, mechanical louvers, final electrical equipment connections, electrical fixtures, freestanding bathroom fixtures, properly functioning appliances, and operation of mechanical and electrical systems.
- [g. Level 7 (Site Finishes Level) - Model unit construction must exhibit final driveway, walks, exterior stairs, final concrete and asphalt finished surface treatment, topsoil quality and application, sodding/seeding of lawn, tree and shrub planting, landscaping beds, playground fall areas and playground equipment. Contracting Officer must be notified and retain the right to inspect all preparation and installation of pavings.

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