

The Sustainability Notebook – An Overview of Requirements

8/8/2014

The following is an overview of requirements for the Sustainability Notebook for information purposes only. Where possible, this overview minimizes required redundant documentation while still meeting the intent.

References:

Office of the Under Secretary of Defense Memorandum: DoD Sustainable Buildings Policy (11-10-2013)
UFC 1-200-02, High Performance and Sustainable Building Requirements, 1 March 2013, Change 2, 1 Aug 2014
FC 1-300-09N, Navy and Marine Corps Design Procedures, 1 May 2014
UFGS 01 33 10.05 20, Design Submittal Procedures, 05/14 (unedited)
UFGS 01 33 29.05 20, Sustainability Requirements for Design-Build, 10/13 (unedited)
UFGS 01 33 29.00 20, Sustainable Requirements, 08/13 (unedited)

Background:

According to the current DoD Sustainable Buildings Policy, “a building that meets the UFC [1-200-02] requirements shall be considered compliant with the requirements of law and the Guiding Principles [GP]. DoD Components are responsible for establishing an auditable process to ensure applicable ... buildings ... meet requirements as defined in the UFC. The auditable process shall include green-building certification of those facilities ...”

UFC 1-200-02 applies to all NAVFAC projects (UFC 1-200-02, 1-4). Compliance with GP for New Construction and Major Renovation projects is reported annually to Congress (UFC 1-200-02, 5-3.1).

Demonstrated compliance with GP is referred to as Guiding Principles Validation (GPV).

Design and construction requirements for GPV are primarily found in UFC 1-200-02. There are two categories of requirements in this UFC based on the project type: New Construction and Major Renovation Projects (Ch. 2) and Minor Renovation Projects (Ch. 3). Refer to the project-specific tracking requirements (discussed below) to identify the project type.

Documentation requirements for GPV are primarily found in FC 1-300-09N, UFGS 01 33 29.05 20, and UFGS 01 33 29.00 20. There are two levels of GPV documentation based on project type and/or cost: The minimum level is simply referred to as GPV and the maximum level is referred to as Additional GPV. The project level of GPV documentation is determined using editor notes in the referenced UFGSs if not specified in project contract(s).

Additional GPV documentation includes Guiding Principles Requirements (GPRs). The GPRs are compatible with both categories of design requirements in UFC 1-200-02. GPRs exist for DB projects (UFGS 01 33 29.05 20) and for construction contractors in DBB projects (UFGS 01 33 29.00 20). Design submittals in a DBB project shall include documentation that demonstrates compliance with UFC 1-200-02.

Tracking requirements for GPV are accomplished in eProjects using a High Performance and Sustainable Building (HPSB) Checklist, also referred to as the NAVFAC Sustainability & Energy Data Record Card (NSEDRC).

Green-building certification is referred to as **Third Party Certification (TPC)** and is obtained through a Third Party Rating System (e.g. LEED or Green Globes). TPC Requirements are listed in a TPC Checklist (e.g. a LEED Checklist). TPC is required when project conditions meet the thresholds indicated in editor notes in the referenced UFGSs.

The Sustainability Notebook contains all supporting documentation to demonstrate compliance with the sustainability requirements identified in the NSEDRC / HPSB Checklist and the TPC Checklist.

Overview:

In a DB RFP template, requirements in Part 3, Chapter 2, include compliance with UFC 1-200-02 and UFGS 01 33 29.05 20 to ensure GPV. The RFP author shall provide a narrative and analysis where a requirement related to the GP is not applicable or obtainable (FC 1-300-09N, 11-4.3.1).

In each design submittal, beginning at the Post Award Kick-Off Meeting, the DOR shall provide a Sustainability section in the Basis of Design including the following (see references and all subsections: FC 1-300-09N, 5-3, 14-3.2, 15-2, 16-2.2, 17-2; UFGS 01 33 10.05 20, 1.11; UFGS 01 33 29.05 20, 1.6.1.1 & 3.1):

- I. Narrative stating the required level of GPV documentation (i.e. GPV or Additional GPV).
- II. The Sustainability Notebook – a bookmarked Adobe PDF file including the following (see references and all subsections: FC 1-300-09N, 14-6; UFGS 01 33 29.05 20, 1.5 & 1.6; UFGS 01 33 29.00 20, 1.3 & 1.4):
 - A. NSEDRC / HPSB Checklist.
 - B. TPC Checklist if TPC is required.
 - C. *Sustainability Action Plan describing how the DOR intends to accomplish the following (or justification where a requirement is not applicable or obtainable - see UFC 1-200-02, 5-2.3):
 1. Achieve each GP requirement (i.e. UFC 1-200-02 requirements related to the NSEDRC / HPSB Checklist; and GPRs if Additional GPV is required).
 2. Achieve each remaining requirement in UFC 1-200-02 (see FC 1-300-09N, 5-3). This includes (but is not limited to) narratives by the architect, mechanical engineer, and electrical engineer presenting conservation measures considered and implemented (Energy Compliance Analysis (ECA)* – UFC 1-200-02, 2-4.3, 3-4.1).
 3. Achieve each TPC Requirement if TPC is required.
 - D. GPR documentation if Additional GPV is required (see UFGS 01 33 29.05 20, 1.7; UFGS 01 33 29.00 20, 1.5). This includes (but is not limited to) demonstrated compliance with Integrated Design requirements* including the following (UFC 1-200-02, 2-2.1, 3-2.1; UFGS 01 33 29.05 20, 1.7.1.1):
 1. Involve all stakeholders in the design through a Charrette or other meeting and design reviews (FC 1-300-09N, 14-7).
 2. Discuss each major building system with all stakeholders.
 - E. TPC documentation if TPC is required, including but not limited to:
 1. Completed TPC Online forms for each identified prerequisite and credit.
 2. All design data, calculations, product data, and certifications required for compliance.
 3. All correspondence with the TPC organization.
 - F. Commissioning Plan and Reports if Additional GPV and/or TPC is required (UFGS 01 33 29.05 20, 1.5.1, d (4) & 1.5.2, d (6) & 1.5.3 & 1.7.1.2; UFGS 01 33 29.00 20, 1.3, d (4) & 1.3.4, d (5) & e (3) & 1.3.5, d (6) & e (4) & 1.5.1).
- Unless noted otherwise, TPC documentation may be used as documentation for corresponding GPRs (UFGS 01 33 29.05 20, 1.7; UFGS 01 33 29.00 20, 1.5). Where TPC documentation would repeat GPR documentation, the DOR shall insert a note into the Sustainability Notebook referring reviewer to GPR documentation (UFGS 01 33 29.05 20, 1.6.1; UFGS 01 33 29.00 20, 1.4.1).
- The DOR shall attach the NSEDRC / HPSB Checklist and the TPC Checklist to UFGS 01 33 29.00 20, Sustainable Requirements, in each design submittal beginning with Pre-Final Design (FC 1-300-09N, 16-4.1, 17-5.1; UFGS 01 33 29.00 20, 1.3, a & 1.3.4, a & 1.3.5, a).

- The project contract(s) shall indicate whether (a) the DOR coordinates with the construction contractor to complete the Sustainability Notebook or (b) the DOR “hands off” the Sustainability Notebook to the construction contractor for completion.
- The DOR or construction contractor shall provide an updated Sustainability Notebook and NSEDRC / HPSB Checklist (a) at the Preconstruction meeting, (b) at Construction Progress Meetings, (c) within 60 days after the Beneficial Occupancy Date (BOD), and (d) after commissioning, testing and balancing, and collection of performance data if required (FC 1-300-09N, 19-1.3; UFGS 01 33 29.05 20, 1.6.1.1 & 1.6.2 & 3.1; UFGS 01 33 29.00 20, 1.4.1.1 & 1.4.2.1 & 3.1).
- The Contracting Officer may deduct from the monthly progress payment if the Sustainability Notebook is not updated (UFGS 01 33 29.05 20, 1.6.1; UFGS 01 33 29.00 20, 1.4.1).

*The Integrated Design Checklist (or ID Checklist – a tool for planning, design, and review) is a template for the Sustainability Action Plan and the Energy Compliance Analysis (ECA). The ID Checklist is also a template for demonstrating Integrated Design, “the most important requirement in achieving a high performance building” (UFC 1-200-02, 2-2). The ID Checklist is a product of the Hampton Roads IPT in NAVFAC MIDLANT.

Transformation of NAVFAC Sustainability Requirements

