



Ames Procedural Requirements

APR 8822.1

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COMPLIANCE IS MANDATORY

Subject: NASA Research Park Design Review Program

Responsible Office: Code DT / NASA Research Park Office

CHANGE LOG

Status [Baseline /Revision /Cancelled]	Document Revision	Date of Change	Description
Baseline	0	6/21/2017	Created APR to replace APD, providing a thorough list of authorities and flow chart revision.
Revision	1		Updated applicable references; clarified scope, process, and terminology; removed reference to separate Planning Clearance Application, revised flow chart.

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PREFACE

P.1 PURPOSE

- a. This directive establishes Ames-specific responsibilities and procedures for the Design Review Program (DRP) for all tenant proposed development projects within the jurisdiction of Ames Research Center, including the districts in the NASA Ames Development Plan (NADP) known as the NASA Research Park (NRP), Bay View, and Eastside/Airfield. Projects within the California Air National Guard cantonment permitted area or proposed by other federal agencies are not subject to review by the DRP.
- b. Design Review ensures that development projects are properly coordinated and that they comply with all NASA planning requirements, such as the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA), and do not conflict with the NADP.
- c. The DRP reviews proposed projects for environmental compliance and planning consistency.
- d. Proposed projects of limited scope such as building remodeling or tenant improvements that do not involve changes of use, historic considerations, or exterior redesign will generally be waived from DRP review. However, special circumstances may determine DRP review at the discretion of the Design Review Board (DRB).

P.2 APPLICABILITY

- a. This directive is applicable to development projects within the jurisdiction stated in paragraph P.1a.
- b. This directive applies to contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or agreements.
- c. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes an expected outcome, and "are/is" denotes descriptive material.
- d. In this directive, all document citations are assumed to be the latest version unless otherwise noted.
- e. Reviews for building-code compliance and issuance of construction permits are beyond the scope of the DRP and are conducted under a separate but related Construction Permit Program (CPP) overseen by the Facilities Engineering Branch (Code JCE) as set forth in APD 8829.1.

P.3 AUTHORITY

- a. NPD 8800.14, Policy for Real Estate Management
- b. NPR 8800.15, Real Estate Management Program

P.4 APPLICABLE DOCUMENTS AND FORMS

- a. NPD 7330.1, Approval Authorities for Facility Projects
- b. NPR 8580.1, NASA National Environmental Policy Act Management Requirements.
- c. NPR 8820.2, Facility Project Requirements.
- d. APD 8800.1 Real Property Management
- e. APD 8812.1 NASA Research Park Office

- f. APD 8829.1, Construction Permit
- g. APR 8500.1, Environmental Procedural Requirement
- h. APR 8553.1, Ames Environmental Management System
- i. APR 8829.1, Construction Permit Process
- j. Mitigation Implementation and Monitoring Plan (MIMP)¹
- k. Facility Project Approval Document (NASA Form 1509)²
- l. NASA Ames Development Plan (NADP)³
- m. Environmental Issues Management Plan (EIMP)⁴
- n. NASA Research Park Design Guide⁵
- o. Transportation Demand Management Plan (TDMP)⁶
- p. Form ARC 57, Construction Permit

P.5 MEASUREMENT/VERIFICATION

- a. Verification of conformance to requirements in this directive are measured through Center and Responsible Organizational management reviews, self-assessments, and subsequent analysis and reports of conformance to requirements, as well as periodic internal audits.

P.6 CANCELLATION

- a. APR 8822.1, NASA Research Park Design Review Program dated June 21, 2017.

Eugene Tu
Director

DISTRIBUTION STATEMENT:

Internal and external distribution.

¹ MIMP: http://www.nasa.gov/sites/default/files/578520main_mimp28229_0.pdf

² NF 1509: <https://forms.neacc.nasa.gov/documents/11002/305376/NF1509.pdf>

³ NADP: http://www.nasa.gov/sites/default/files/578481main_nadp_dec_02-1.pdf

⁴ EIMP: https://www.nasa.gov/sites/default/files/578499main_eimp_-_complete_document_-_final_1_march_20057.pdf

⁵ NRP Design Guide: http://www.nasa.gov/sites/default/files/578482main_nrp_design_guide_-_nov_2001.pdf

⁶ TDMP: http://www.nasa.gov/sites/default/files/578521main_nrp_tdm_plan_7-10-02.pdf

CHAPTER 1 RESPONSIBILITIES

1.1 The Project Applicant shall:

- a. Be the project manager for the proposed project and have authority to make project-related decisions for the project.
- b. Prepare submittal documents as described in this directive.
- c. Concur with the DRB's findings and incorporate into the project any changes, recommendations, and requirements identified by the DRB.
- d. Have an agreement with NASA for any services to be provided in support of the proposed project.

1.2 NASA-Assigned Project Representative shall:

- a. Be assigned by Code DT to all projects.
- b. Be a civil servant authorized to manage agreements for services furnished by NASA at the request of the project applicant.
- c. Assist the project applicant through the DRP, including:
 - (1) referring any project design issues to the DRB members or other applicable agencies for resolution;
 - (2) distributing review submissions to the DRB;
 - (3) receiving and compiling comments from the DRB;
 - (4) recording and returning DRB review actions to the project applicant; and
 - (5) routing applicable documents for required approvals upon DRP clearance.

1.3 Design Review Board shall:

- a. Include the following members or their designated representative:
 - (1) DRB Chair – a representative from the NRP office who is responsible for the review of the proposed project and issuing the process clearance memo.
 - (2) Planner – reviews proposed project for consistency with Ames' master development and land use plans.
 - (3) Chief Building Official (CBO) – reviews project plans for unique conditions and code requirements for future approval of construction permits.
 - (4) Fire Marshal – reviews project plans for unique conditions and code requirements for future fire/life/safety compliance.
 - (5) Engineer(s) - reviews proposed project for availability of support infrastructure.
 - (6) Center NEPA Manager - reviews proposed project to determine whether it is consistent with existing NEPA documentation and, if not, identifies the appropriate NEPA compliance pathway.
 - (7) Cultural Resources Manager (CRM) - reviews proposed project to determine whether NHPA consultation requirements are triggered.

(8) Real Property Accountable Officer (RPAO) – reviews proposed project to determine extent of changes to NASA real property inventory and any required real property agreements that are triggered.

(9) Ad hoc members may be required as appropriate to review each project as designated by the DRB Chair (e.g., National Full-Scale Aerodynamic Complex (NFAC), Wind Tunnel Test Engineering, NASA Ames Office of Protective Services, NASA Ames Safety and Mission Assurance Directorate, or others as necessary).

- b. Determine the extent of design review for each proposed project at the time the project is submitted.
- c. Conduct informal discussions and formal reviews of submitted proposed projects.
- d. Evaluate whether proposed projects are sufficient for Facility Projects Approval and further review for construction permits.
- e. Conduct back-check reviews of project construction drawings during the construction permitting process to ensure conformance with applicable laws, policies, regulations, and conditions for DRP clearance.

CHAPTER 2 PLANNING CRITERIA

2.1 Review Elements

2.1.1 The Architecture and Planning review element addresses and implements the land use and design regulations of the NADP. The NADP, through the Land Use Plan, NRP Design Guide, Transportation Demand Management Plan (TDMP), Mitigation Implementation and Monitoring Plan (MIMP), Environmental Issues Management Plan (EIMP), and other guidelines, places limits on activities and the dimensions of the structures in which they occur.

2.1.2 The environmental review element, performed by the Environmental Management Division (Code JQ) includes assessment of the proposed project's effect on the human and natural environment. During this assessment, the proposed project is examined for consistency with existing NEPA documentation, such as the Programmatic Environmental Impact Statement (PEIS) specific to the NADP, or if other appropriate documentation will be required. The environmental review typically begins with a review of a completed Environmental Checklist and supporting documentation provided by the Project Applicant. The latest version of the checklist is electronically available from the Environmental Management Division.

2.1.3 The cultural resource review element, which is required for all projects and activities, determines if the project conforms to the Secretary of Interior's Standards for Rehabilitation and whether or not the project triggers a NASA obligation to consult with the California State Historic Preservation Officer (SHPO) under Section 106 of the NHPA. NASA Ames' CRM will initiate consultation with the SHPO and the Advisory Council on Historic Preservation if a consultation is required. The Project Applicant will support the preparation of required consultation documents.

2.2 Applicable Guidelines

- a. **NASA Ames Development Plan (NADP).** The NADP describes NASA's plan for development of the property under its jurisdiction and stewardship, broken down into various planning and development districts, with a description of land use, infrastructure, facilities, open space, and transportation requirements for each district. All development projects are reviewed for consistency with the planning principles established by the NADP.
- b. **Programmatic Environmental Impact Statement (PEIS) and Mitigation Implementation and Monitoring Plan (MIMP).** NASA's 2002 PEIS contains the analysis of the environmental consequences associated with the development under the NASA Ames Development Plan. The MIMP summarizes the mitigation measures identified as necessary in the PEIS and how, by whom, when, and where they are required. All development performed under the NADP must conform to the MIMP and will be reviewed by the DRB. The PEIS serves as a starting point for assessing a specific project's effects on the environment. NASA first determines whether the PEIS adequately covers the proposed project. If a project is not adequately covered, additional environmental review pursuant to NEPA will be required.
- c. **Transportation Demand Management Plan (TDMP).** Implementation of a TDMP is required by the MIMP. The TDMP is an identified mitigation to reduce traffic and air-quality impacts from projects developed as part of the NADP. The TDMP outlines policies and programs to reduce vehicle trips, thereby reducing emissions of nitrogen oxides and hydrocarbons, in turn reducing ground-level ozone. In addition, fewer vehicle trips reduce the amount of land that must be paved to support roadways and parking lots. The TDMP includes information on the number of parking spaces allotted to each building, bike and pedestrian amenities, bus-and shuttle-stop spacing, and other overall design and planning elements.

d. **The Environmental Issues Management Plan (EIMP).** The EIMP provides a decision framework for any disturbance of existing ground water and remediation systems, and the management of residual hazardous chemicals in soils and ground water at the site during development. The EIMP also describes design options for mitigating health risks inside buildings over contaminated areas of the site. The various phases of health-risk assessment, risk management during construction, and post construction risk management are outlined. These procedures shall be adhered to in the development of project documents.

CHAPTER 3 DESIGN REVIEW PROCEDURE

3.1 DRP Review Process Overview

3.1.1 The DRP review process includes three possible stages of review: Pre-Conceptual Design Review, Conceptual Design Review, and Schematic Design Review (if applicable). The process is schematically shown in Appendix C: Design Review Program Flowchart. The project applicant should meet with the DRB before beginning the project design and periodically thereafter to ensure a common understanding of site-specific design constraints resulting from existing guidelines, federal entitlements, and other statutory and regulatory requirements.

3.2 Pre-Conceptual Design Review

3.2.1 The first stage for all proposed projects is the Pre-Conceptual Design Review. The purpose of this review is to adequately define the scope of the proposed project, to determine the level of environmental review needed for site approval, and to ensure that the applicant (and their designers) are aware of, and in compliance with, all NADP requirements, applicable environmental mitigation measures, or other applicable laws concerning the proposed site. The Pre-Conceptual Design Review is complete when the functional requirements of the proposed action are identified and the site location is approved.

3.2.2 The Pre-Conceptual Design Phase (PDP) shall be initiated by the project applicant with a PDP submittal. This shall include a Scope Narrative, containing a written description of the proposed project, its purpose and need, location, existing site conditions, and any unique operational needs. This should also be accompanied by figures to depict the size, scale, location(s), and footprint of project work areas, including any areas needed for associated infrastructure, staging, parking, or other supporting work. This will be used to identify the extent of the property needed for the proposed action, and to explain the functional requirements of the project for submittal on an NF 1509 for facility projects approval in accordance with NPD 7330.1 and NPR 8820.2. Other pre-conceptual design document requirements are listed in Appendix D: Pre-Conceptual Material Submittal Requirements.

3.2.3 Upon submission of the PDP submittal package an intake meeting should be convened with the Project Applicant to present the scope of the project for DRP review and to explain the basis for the proposed site location.

3.2.4 To obtain site approval, the Project Applicant should ensure that they secure the property rights to build on the selected location, including the execution of any applicable outgrants pursuant to NPR 8800.15 and the completion of the appropriate NEPA documentation pursuant to NPR 8580.1.

3.2.4.1 “Cultural resources” and a project’s effects to them is an environmental impact factor that is analyzed during the NEPA review, but a separate review requirement dictated by the NHPA may also be required. During the PDP the Ames CRM reviews the proposed project and determines if a consultation under NHPA with the SHPO needs to occur. If consultation is required, then site approval will be contingent on a finding of no adverse effects.

3.2.4.2 The Center NEPA Manager (CNM) will assess whether information provided in the PDP is adequate for the environmental review. The project proponent may be required to provide additional documentation (e.g., an estimate of air emissions, a biological survey, a traffic impact assessment, etc.) or execute a Reimbursable Space Act Agreement with NASA for NASA to generate required additional studies, notices, and other documentation to support the environmental review. If the project is determined to be adequately covered by an existing NEPA document or qualifies for a

Categorical Exclusion (CatEx) then the proposed site can be approved. If additional NEPA documentation (i.e., an Environmental Assessment (EA), Environmental Impact Statement (EIS), or supplement to the existing PEIS) is determined to be required, then site approval will be contingent on NASA's ability to complete the additional documentation and conclude the NEPA process, including adequate public notice and review, and a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) as appropriate.

3.2.4.3 The Real Property Accountable Officer will review the site location and project work areas to determine the extent of NASA's real property affected by the proposed project. If the affected area is not covered by an existing real property agreement, then site approval will be contingent on the project applicant securing an applicable outgrant (e.g., lease, easement, permit, license, right of way, etc.) for the rights to build and continue to operate and maintain property on the proposed site.

3.2.5 The applicant should ensure that they have all necessary site approvals prior to preparing conceptual design documents for the next stage. If the site cannot be approved, the DRP will be suspended. In order to resume any further reviews, the applicant must either revise the scope, areas, and impacts of the project to be consistent with existing environmental documentation and real property agreements or wait until the required conditions for site approval are fulfilled.

3.3 Conceptual Design Review

3.3.1 After successful completion of the Pre-Conceptual Design Review, the proposed project may proceed to the Conceptual Design Review. The purpose of this review is to illustrate how the functional requirements of the proposed project will be achieved, taking into consideration any site-specific constraints for facility projects approval. The Conceptual Design Review is complete when the NF 1509 Facility Project Approval Document is complete.

3.3.2 The applicant shall submit the Conceptual Design Review (CDR) submission and work closely with the DRB for review and response. Requirements for the Conceptual Design Review submission are listed in Appendix E: Conceptual and Schematic Design Review Submittal Requirements. Throughout the Conceptual Design Review, NASA will check that the project remains consistent with the site approval and NEPA compliance documentation prepared during the Pre-Conceptual Design Review. Substantial scope changes that affect the potential environmental impacts of the project may trigger revisions to the existing NEPA documentation.

3.3.3 The DRB will convene upon receipt of a complete CDR. The Conceptual Design Review has several purposes:

- a. To ensure the minimum requirements/conditions for submission have been met;
- b. To ensure the conceptual design is consistent with the concept established in the Pre-Conceptual Design Review (e.g., regarding NEPA and NHPA compliance);
- c. To ensure that the proposed project will be consistent with the land use and design regulations of the NADP (e.g., the Land Use Plan, NRP Design Guide, TDMP, MIMP, EIMP, and other guidelines); and
- d. To determine if further schematic designs will need to be reviewed to illustrate how the functional requirements of the proposed project will be met prior to issuing NF 1509 Facility Project approval.

3.4 Schematic Design Review

3.4.1 Following satisfactory completion of the Conceptual Design Review, the DRB may require a Schematic Design Review. The DRB will inform the applicant if a Schematic Design Review submittal is required.

3.4.2 If a Schematic Design Review is not required, but the applicant desires to submit a Schematic Design, the DRB, at its sole discretion, may perform a courtesy review.

3.4.3 Submittal requirements for Schematic Design Review are listed in Appendix E.

3.4.4 Schematic Design Review may occur once the applicant has sufficiently addressed any major design issues identified during the Conceptual Design Review. The DRB will evaluate the architectural program and required functions of the proposed project. The DRB will review proposed project drawings, documents, or other media that illustrate the concepts of the design and include spatial relationships, scale, and form of the project.

3.4.4.1 For issuance of a construction permit, procedures outlined in APD 8829.1 must be followed. While this process is underway, there will be DRB back-check of the design documentation to confirm that NEPA documentation remains sufficient for the design and that any conditions for DRP clearance are being addressed. As described in APD 8829.1, final facility designs must be submitted for issuance of a construction permit by the Facilities Engineering Branch (Code JCE).

3.5 Optional Technical Reviews

3.5.1 The applicant may choose to submit specific design documents for additional review. These reviews are known as Optional Technical Reviews during the DRP review. The Optional Technical Reviews are reviewed by NASA in its sole discretion as a courtesy to the applicant. However, the Optional Technical Reviews are not a part of the DRP process. In no case will Optional Technical Reviews be considered prior to a NEPA compliance decision (i.e., no earlier than completion of the PDP). Optional Technical Reviews will in all cases be resolved prior to issuance of the corresponding construction permit.

3.6 Completing the Design Review Process

3.6.1 The Design Review Process is cleared when the Pre-Conceptual Design Review, Conceptual Design Review, and any applicable Schematic Design Reviews are complete, conditions for site approval are achieved, and the NF 1509 Facility Project Approval Document is complete. Optional Technical Reviews and review of design documentation for construction permitting all occur after DRP clearance.

3.6.2 Applicants may proceed with permit submissions after the applicant fulfills the requirements of this directive and obtains facility projects approval in accordance with NPD 7330.1 and NPR 8820.2. DRP clearance does not include review for code compliance and subsequent permit submissions should conform to applicable codes and design criteria at the time of permit submission.

CHAPTER 4 RECORDS

4.1 Records of DRB Discussions and Final Clearances

4.1.1 Records shall document the discussions of the DRB and final clearances of the projects being evaluated by the DRB such as:

- a. Records of meetings that include:
 - (1) the topics discussed,
 - (2) the names of individuals attending and their organizational affiliations (organization or function for NASA attendees),
 - (3) action items, and
 - (4) decisions reached.
- b. Memoranda documenting DRB approval of a schematic design that clearly lists any pending issues that will be backchecked for completion during the APR 8829.1 construction permitting process or during the construction process and includes the following attachments:
 - (1) The completed Environmental Checklist and any other NEPA documentation for the project, such as a Record of Environmental Consideration, and
 - (2) SHPO consultation package and SHPO concurrence, if any.

4.1.2 These records are held by the Facilities Engineering Branch and shall be included with the project construction drawings and retained as a part of the closed permits under APR 8829.1.

APPENDIX A. DEFINITIONS

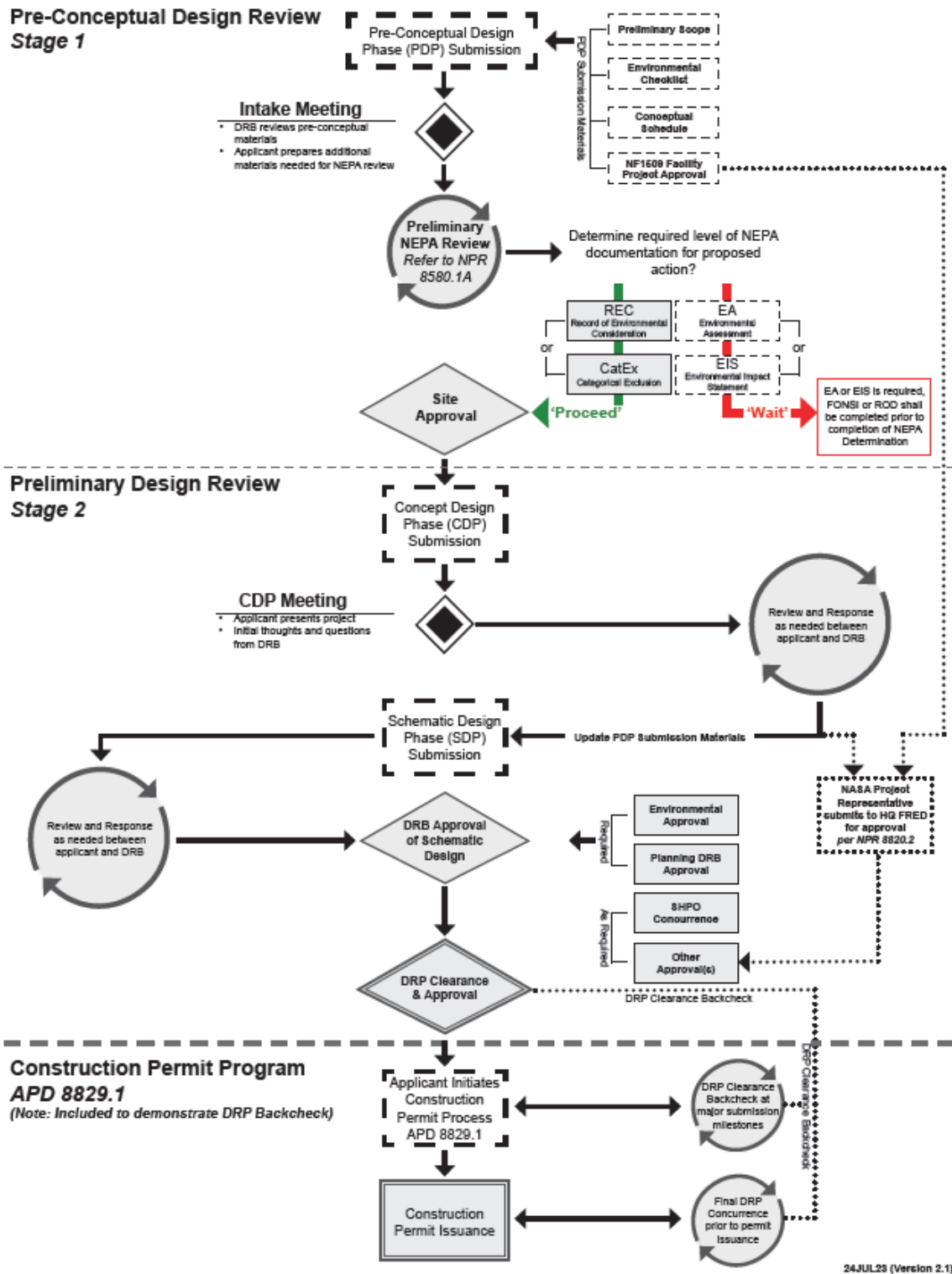
Conceptual Design	A high-level design of the proposed project, a further development of the Pre-Conceptual Design into a realistic and appropriate design. This is the research phase of the project when zoning requirements or regulatory restrictions are addressed.
Pre-Conceptual Design	A preliminary design with sufficient detail to allow for adequate review of the proposed project and its potential environmental effects. The design should contain a Scope Narrative with accompanying figures to outline the scope and physical extent of the project, but does not include comprehensive Conceptual Design, engineering, or detailed technical information.
Schematic Design	The design stage when technical drawings have been prepared at a higher level of detail, typically including measurable dimensions and details. The schematic design will build upon the conceptual design to resolve scope of the project including scale and relationships between building components.
Scope Narrative	A required submittal to accompany the Pre-Conceptual Design, defining the functional requirements of the project.

APPENDIX B. ACRONYMS

ANSI	American National Standards Institute
APD	Ames Policy Directive
CatEx	Categorical Exclusion
CBO	Chief Building Official
CDR	Conceptual Design Review
CNM	Center NEPA Manager
CPB	Construction Permit Board
CPP	Construction Permit Program
CRM	Cultural Resources Manager
DRB	Design Review Board
DRP	Design Review Program
EA	Environmental Assessment
EIMP	Environmental Issues Management Plan
EIS	Environmental Impact Statement
FAR	Floor Area Ratio
FONSI	Finding of No Significant Impact
LEED	Leadership in Energy and Environmental Design
MIMP	Mitigation Implementation and Management Plan
NADP	NASA Ames Development Plan
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NFAC	National Full-Scale Aerodynamic Complex
NHPA	National Historic Preservation Act
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
NRP	NASA Research Park
PDF	Portable Document Format
PDP	Pre-Conceptual Design Phase
PEIS	Programmatic Environmental Impact Statement
ROD	Record of Decision
RPAO	Real Property Accountable Official
SHPO	State Historic Preservation Officer
TDMP	Traffic Demand Management Plan

APPENDIX C. DESIGN REVIEW PROGRAM FLOWCHART

NASA Research Park Design Review Program (DRP) Workflow - APD 8822.1



APPENDIX D. PRE-CONCEPTUAL DESIGN REVIEW SUBMITTAL REQUIREMENTS

- D.1 The following are the submittal requirements for Pre-Conceptual Design Review:
- a. Preliminary Scope Narrative for proposed project
 - b. Conceptual Project and Submissions Schedule
 - c. Environmental Checklist or other documentation required to conduct NEPA review
 - d. Facility Project Approval Document (NF 1509)

APPENDIX E. CONCEPTUAL AND SCHEMATIC DESIGN REVIEW SUBMITTAL REQUIREMENTS

Conceptual Design Submittal

Conceptual Design Submittal requirements include digital copies of the following drawings:

- A. Title Sheet: The first sheet must show the following:
 1. Name of the project and description of the proposed use.
 2. Table of Contents listing all plan set sheets, content and page number.
 3. Location map at 1" = 400' scale showing development parcel(s).
- B. Building Data Summary in table format, including the following:
 1. Total acres of subject property (net and gross).
 2. Total amount of floor space for each nonresidential use.
 3. Total number of dwelling units, giving the number of each different type of dwelling unit, if applicable.
 4. Total number of off-street parking and loading spaces required and provided.
 5. Total amount of surface area proposed for off-street parking and lighting and percentage of site area.
 6. Total footprint area of buildings and percentage of site area.
 7. Total landscaped area and percentage of site area.
 8. Density in terms of Floor Area Ratio (FAR) for nonresidential projects, or dwelling units per acre for residential projects.
 9. Site Plan at not smaller than 1" = 40' scale, including dimensions of site, parking areas, buildings and setbacks, adjacent streets, access and egress, proposed street trees, and utilities.
 10. Ground Floor Plan with adjacent site areas at not smaller than 1/16" = 1' scale. For alteration work, show all existing partitions that are to be removed, altered, or remain the same.
 11. Floor Plans for above-and below-ground floors and roof at not smaller than 1/16" = 1' scale.
 12. At least two (2) project sections and all major exterior elevations at not smaller than 1/16" = 1' scale, indicating proposed colors and materials.
 13. Landscape Plan showing preliminary planting materials, furnishings, and exterior lighting demonstrating use of native California plants, irrigation with reclaimed water, and reduction of light pollution.
 14. At least one exterior perspective from a street-level viewpoint.

Information should be included on plans to demonstrate compliance with the following requirements: energy conservation, Leadership in Energy and Environmental Design (LEED) certification, sound transmission, disabled access, Programmatic Environmental Impact Statement Mitigation Implementation and Monitoring Plan, Environmental Issues Management Plan, and Transportation Demand Management Plan (TDMP). For a building that is an unsafe structure, show how all-unsafe conditions will be corrected.

All drawings should be submitted as a complete set in Portable Document Format (PDF) sized for reproduction on standard ANSI A, ANSI B, or ANSI D sheets.

Schematic Design Submittal

Submittal requirements include digital copies of the architect's Schematic Design documents, including updated and more-detailed versions of all drawings and information required for the Conceptual Design Review.

If a Schematic Design Phase Submittal is provided, drawings should be suitable for a 30 percent Construction Permit Board (CPB) review and include:

- A. Preliminary Code Compliance Information such as Occupancy, Classifications, and proposed approach to comply with Allowable Area and separation requirements.
- B. Outline Specifications, including cut sheet information for all exterior products and finishes.
- C. Material Selections, including material and color boards for all exterior and major interior spaces, including a mock-up for each of the major exterior wall treatments of the project.
- D. Landscape Selections, including material and equipment selections for hardscape, lighting, equipment, furnishings, and planting schedules demonstrating use of native California plants, irrigation with reclaimed water, and reduction of light pollution.
- E. Lighting Schedules, with samples or manufacturer's literature for exterior and interior public spaces, including parking garages. Lighting locations are to be shown on landscape plans, reflected ceiling plans, and elevations. Spaces such as arcades, colonnades, lobbies, courtyards, and gallerias should be included.
- F. Signage and Graphics master plan including designs, locations, and samples for the building exterior, including parking garages, shown in plan and elevation.

Completed LEED checklist to demonstrate that the design will achieve LEED Certification.

