Kennedy NASA Procedural Requirements

Effective Date: April 21, 2022

Expiration Date: April 21, 2027

Responsible Office: Spaceport Integration and Services

FACILITY ASSET MANAGEMENT PROCEDURAL REQUIREMENTS

National Aeronautics and Space Administration

John F. Kennedy Space Center

KDP-KSC-T-2120, Rev. Basic

Change Log

Date	Revision	Description of Changes	
6/27/12	B-1	Admin change to correct job title from Facility Coordinator to Facility Manager Coordinator and correct corresponding acronyms. Changed 3.4.6x from annual self to periodic inspections.	
2/29/16	B-2	Extended expiration date from 3/28/16 to 6/28/16 to allow for review, Center wide review and comments, and finalization of signature package. Changed Responsible Office from Center Operations to Spaceport Integration and Services.	
6/23/16	B-3	Guidance from NASA Headquarters delayed Center wide review and finalization of signature package.	
10/3/16	С	Updated space standards in the Physical Space Management section. Replaced Americans with Disabilities Act (ADA) information with Architectural Barriers Act (ABA). Reworked Facility Management Program section to reflect current practices.	
2/6/18	C-1	Added "Conference Room Listings can be found at <u>Professional</u> Support Team Website" to 4.2.2.1.	
8/30/2021	C-2	Extension approved to allow for Center wide review, comment disposition, and processing of final signatures.	
1/07/2022	C-3	Initial changes made to the document were re-evaluated/ withdrawn. Due to year-end holidays/vacations, stakeholders were unable to address new changes. A new expiration of April 7, 2022 would be sufficient to allow for completion of changes, Center-wide review, and signatures.	
4/21/2022	D	7, 2022 would be sufficient to allow for completion of changes,	

• 3.5.4 added gg.
Chapter 4:
• 4.1.1.b added items (1) – (6)
4.1.2.b. – added "The sign head shall be slanted to the
correct eye level for maximum readability."
4.1.4.c. – added "Such signs shall be limited to the following
information." Added items (1) – (4)
• 4.3.1.c. changed to 4.3.1.1
• 4.3.1.2 – 4.3.1.4 changed to a. – c.
• 4.3.1.5 – 4.3.1.7 changed to 4.3.1.2 – 4.3.1.4
4.3.1.4.d. – added "starting at the main office entrance"
4.3.1.4.e. – removed "instance of"
4.3.1.4.g. – updated with Architectural Barriers Act
Accessibility Standards
4.3.3 – added section description
Appendix A:
 4.3.1.4.d. – added "starting at the main office entrance" 4.3.1.4.e. – removed "instance of" 4.3.1.4.g. – updated with Architectural Barriers Act Accessibility Standards 4.3.3 – added section description

• Whole numbers – added "or decimal"1.3.7

TABLE OF CONTENTS

- P.1 PURPOSE
- P.2 APPLICABILITY
- P.3 AUTHORITY
- P.4 APPLICABLE DOCUMENTS AND FORMS
- P.5 MEASUREMENT/VERIFICATION
- P.6 CANCELLATION

CHAPTER 1. Facility Asset Management

- 1.1 Goals
- 1.2 Objectives
- 1.3 Responsibilities

CHAPTER 2 Facility Management Board

CHAPTER 3 Asset Planning and Management

- 3.1 Master Planning
- 3.2 Real Property
- 3.3 Site Planning
- 3.4 Excavation Permit/Utility Locate
- 3.5 Facility Management Program

CHAPTER 4 Physical Facility Management

- 4.1 Signs
- 4.2 Physical Space Management
- 4.3 Facility Numbering Standards
- 4.4 Reserved Parking Assignment
- 4.5 Designation of Operations and Maintenance and Sustaining Engineering Responsibilities

APPENDIX A Definitions APPENDIX B Acronyms

PREFACE

P.1 PURPOSE

This directive defines requirements, functions, and procedures; assigns responsibilities; and provides definitions for the overall asset management of Kennedy Space Center (KSC) real property.

P.2 APPLICABILITY

- a. This Kennedy National Aeronautics and Space Administration (NASA) Procedural Requirement (KNPR) applies to all KSC organizational elements.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms: "may" or "can" denotes discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.
- c. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

P.3 AUTHORITY

- a. NASA Policy Directive (NPD) 8800.14, Policy for Real Estate Management
- b. NASA Procedural Requirements (NPR) 8800.15, Real Estate Management Program

P.4 APPLICABLE DOCUMENTS AND FORMS

- a. Executive Order (EO) 13327, Federal Real Property Asset Management
- b. NPD 4100.1, Supply Support and Material Management Policy
- c. NPR 1441.1, NASA Records Management Program Requirements
- d. NPR 4100.1, NASA Supply Support and Material Management
- e. NPR 8810.1, Center Master Planning
- f. NASA Real Property Asset Management Plan (AMP)
- g. <u>Kennedy NASA Policy Directive (KNPD) 8830.2, Prohibited Contractor Use of KSC-</u> Owned and -Managed Space
- h. KNPR 1600.1, KSC Security Procedural Requirements
- i. KNPR 8715.3, KSC Safety Procedural Requirements
- j. B-0001, Facility Management Board
- k. <u>KDP-KSC-P-1295</u>, Processing of Kennedy Space Center (KSC) Real Property Agreements

- I. <u>KDP-KSC-P-1302</u>, Excavation and Waiver Process
- m. KDP-KSC-P-1303, Site Planning
- n. KDP-KSC-P-1304, KSC Space Allocation and Utilization Process
- o. KDP-KSC-P-1311, Space Modifications and Move Process
- p. KDP-KSC-P-3253, Kennedy Space Center (KSC) Facility Asset Management Process
- q. <u>KDP-KSC-P-3711</u>, Accountability of Real Property (RP)
- r. <u>KDP-KSC-P-3721</u>, Assigned Parking Process
- s. <u>KDP-P-3235, Land Withdrawal from Fish and Wildlife Services (FWS) to Support NASA Missions</u>
- t. KSC-DES-0062, Real Property Accountable Officer (RPAO)
- u. KSC-DES-0063, Facilities Utilization Officer (FUO)
- v. KSC-PLN-8810.1, KSC Master Plan
- w. <u>KSC Form 21-136, Turnover of O&M and/or Sustaining Engineering Responsibility for Spaceport Facilities, Systems, Equipment, and Utilities (FSEU)</u>
- x. Kennedy Customer Agreement (KCA)-1649, Interagency Agreement Between the National Aeronautics and Space Administration, John F. Kennedy Space Center and United States (U.S.) Department of the Interior, Fish and Wildlife Services for Use and Management of Property at NASA, John F. Kennedy Space Center Known as The Merritt Island National Wildlife Refuge
- y. National Fire Protection Association (NFPA) 101, Section 7.2.2.5.4

P.5 MEASUREMENT/VERIFICATION

None

P.6 CANCELLATION

This document cancels KNPR 8830.1, Rev C-3, Facility Asset Management Procedural Requirements.

/original digitally signed by/

Nancy P. Bray

Director, Spaceport Integration and Services

Distribution: TechDoc Library

CHAPTER 1. Facility Asset Management

1.1 Goals

- 1.1.1 KSC supports its programs and workforce through excellence in real property management and by ensuring its real property assets meet Agency goals. KSC also provides appropriate stewardship of these assets to achieve the best value for the Government. The Center strives to identify and develop innovative real property management solutions and to construct and operate only the real property required to conduct NASA programs, maintain its core capabilities, and meet national responsibilities. The Center identifies, plans, and implements options to eliminate underutilized and unutilized real property through either demolition or public and private partnerships, utilizing out-grants and other real property instruments.
- 1.1.2 KSC adheres to the Agency real property asset management goals as identified in the <u>AMP</u> as required by <u>EO 13327</u>. KSC embraces the principles of the Federal Real Property Council established by <u>EO 13327</u>.
- 1.1.3 KSC effectively manages and optimizes real property assets, investments, operations, and disposal actions; and related decisions are integrated with and supportive of core mission activities.

1.2 Objectives

KSC adheres to the objectives of the Agency as identified in the AMP.

1.3 Responsibilities

- 1.3.1 The KSC Center Director (CD) is responsible for:
- a. Managing KSC real property in accordance with NPR 8800.15.
- b. Designating an RPAO (see KSC-DES-0062).
- Designating an FUO (see KSC-DES-0063).
- 1.3.2 The Director, Spaceport Integration and Services (SI), is responsible for chairing the Facility Management Board (FMB).
- 1.3.3 Heads of KSC directorates are responsible for assigning a Directorate Facility Utilization Manager (DFUM).
- 1.3.4 The DFUM is responsible for representing, coordinating, and managing organizational interests in space utilization issues.
- 1.3.5 The RPAO is responsible for:
- a. Real property accountability, including the recording and reporting of the NASA real property inventory and management of real property records in accordance with NPR 1441.1.
- b. Planning, directing, coordinating, and managing the activities of all the Center's real property, including signing real property records and agreements.

1.3.6 The FUO is responsible for:

- a. Planning, managing, and accounting for tenancy of all office, warehouse, technical, and associated special purpose space in all facilities and trailers classified as KSC real property. This includes making assignments, reassignments, and coordinating with organizations that are withdrawing assignment of space that is vacant, not properly utilized, or not justified.
- b. Implementing space utilization standards and dispositioning deviation requests. In the event a deviation request is not approved by the FUO, any customer request for reconsideration shall be coordinated with the Chief of the Infrastructure Branch.
- 1.3.7 The Facility Program Manager (FPM) shall:
- a. Develop policy and procedures for the Facility Manager (FM) program.
- b. Provide guidance and oversight for the FM program.
- c. Act as the Center's interface to external entities for the FM program.
- d. Collaborate with the Institutional Projects Branch, Center Master Planning, and the Infrastructure Branch to formulate plans for additions, alterations, and replacements, as well as operations and maintenance projects.
- e. Disseminate the approved, prioritized schedule for facility projects by fiscal year as determined by the local authority projects manager.
- f. Act as the Center's move/mode coordinator and program manager.
- g. Coordinate the development, implementation, and monitoring of a facility safety program with KSC Safety and Mission Assurance (SMA) Institutional Division safety representatives.
- h. Coordinate assignments and reassignments of space with the FUO.
- 1.3.8 Program directorates shall:
- a. Disseminate programmatic or institutional facility information for assigned areas of responsibility to individual FMs.
- b. Coordinate known or projected facility project requirements for additions, alterations, replacement, or maintenance with individual FMs. Convey this information in a prioritized manner to the FPM and the FUO.
- c. Ensure compliance of policy and procedures in assigned facility assets.
- d. Coordinate with all FMs to ensure there are processes in place for safe access to assigned facilities.
- e. Collect and evaluate hazard and safety practice information so the KSC SMA Institutional Division safety representatives and the FM can address pertinent safety management issues.

1.3.9 The FMs shall:

- a. Serve as the facility point of contact to call job orders into the institutional services contractor Spaceport Integration Center (SIC) Work Control or Duty Office regarding facility or ground maintenance issues. After duty hours the occupants should contact the Duty Office. The SIC will contact the FM when there is a facility related issue that may impact the occupants (e.g., power outage, loss of heating, ventilation, and air conditioning, etc.). Report any issues to the NASA FPM. Note that "institutional services contractor" is a generic term and does not refer to the former KSC Institutional Services Contract.
- b. Maintain awareness of facility conditions, changes to system configuration, and operations and coordinate with the FM, FPM and FUO, as required.
- 1.3.10 NASA Site Planner is responsible for managing the Site Planning Process as described in paragraph 3.3.

CHAPTER 2 Facility Management Board

- 2.1. The FMB establishes policies, procedures, and standards for physical space requirements and Center development based on <u>B-0001</u>, <u>NPD 8800.14</u> and <u>NPR 8800.15</u>. The FMB Web site is located at https://fmb.ksc.nasa.gov/.
- 2.2. The FMB shall serve as the Center facility planning, communication, assessment, and approval body for facility asset management issues.
- 2.3. All new, modified, or changing facility asset requirements shall be vetted through the FMB. Unresolved issues will be forwarded to the Kennedy Center Management Council for resolution.
- 2.4 Unresolved nonconcurrences for the Site Planning process shall be presented to the FMB for resolution, unless the requester determines the request is to be canceled.
- 2.5 The FPM shall act as, or delegate the duties of, secretariat of the FMB.

CHAPTER 3 Asset Planning and Management

3.1 Master Planning

- 3.1.1 The principles of master planning, and the control and format of the Master Plan, are detailed in <u>NPR 8810.1</u>. Initiation and administration of master planning is in accordance with <u>NPR 8800.15</u>.
- 3.1.2 The Master Plan is the basic point of reference for review and approval of specific projects as a part of the normal budget formulation and execution process.
- 3.1.3 Area Development Plans (ADP) are a subset of the Master Plan and shall be in alignment with the Master Plan, vetted by the Master Planner, and approved by the CD, prior to official release for any purpose. In lieu of applicable ADPs, developable property identified in the Center Future Development Concept should be utilized as a guide for future KSC development if determined appropriate by the Master Planner.

3.2 Real Property

- 3.2.1 Real Property is managed in accordance with NPD 8800.14, NPR 8800.15, KDP-KSC-P-3711, KDP-KSC-P-3253, and KDP-KSC-P-1295; as well as, KNPD 8830.2 and this KNPR.
- 3.2.2 Copies of all documents pertaining to real property transactions, such as acquisitions, disposals, leases, and permits shall be included in the real property records. The real property records are maintained and managed by the KSC RPAO. All NASA real property information and transactions are documented and maintained in the Real Property Management System (RPMS). However, RPMS and other spaceport asset data will be informally maintained for easier customer access purposes in the Authoritative Facility List which can also be accessed via the FMB Web site.
- 3.2.3 The U.S. FWS manages NASA KSC property known as the Merritt Island National Wildlife Refuge. All land required to support NASA's space-related missions shall be withdrawn from the FWS in accordance with KCA-1649 and KDP-P-3235 to shift the operational responsibility to NASA. Public Law 93-626, approved January 3, 1975, (88 Stat. 2121) established the Canaveral National Seashore, Florida, consisting of some 67,500 acres on KSC property, and ensured that the refuge, although within the boundary of the seashore, will continue to be administered as part of the National Wildlife Refuge System.

3.3 Site Planning

- 3.3.1 Site planning shall be managed in accordance with KDP-KSC-P-1303.
- 3.3.2 Facility site requests shall be reviewed by the RPAO and Master Planner for conformance to KSC policy and the Master Plan. The NASA Site Planner will provide final approval after concurrence from RPAO, KSC Master Planning, KSC SMA Institutional Division, KSC SI Medical and Environmental Services Division (SI-E), SI Protective Services Office (SI-P), and affected facilities and program representatives

3.4 Excavation Permit/Utility Locate

3.4.1 Excavation permits, waivers, and related utility locates shall be managed in accordance with KDP-KSC-P-1302.

3.5 Facility Management Program

- 3.5.1 The Facility Management Program (FMP) establishes the framework upon which NASA operates and maintains its facilities and associated utility, transport, and communication systems in a manner that provides the most safe, suitable, and productive environment for missions supporting normal operations and contingencies.
- 3.5.2 The FMP encompasses facilities, adjacent buildings and structures, parking areas, common areas, and exterior surroundings. The program will also provide for a single point of contact for occupants regarding general facility issues.
- 3.5.3 The FMP shall be operated under the cognizance of the FMB and be organized and managed in the following manner:
- a. The FMP shall provide guidance and oversight for the program.
- b. The FMs shall be assigned management of specific facilities or geographic asset groupings and integrate activity with the FPM as required.
- 3.5.4 The FMs shall ensure the following expectations are met:
- a. Life Safety: Facility systems shall function reliably, safely, and meet applicable codes and standards. Life safety policies and requirements protect occupants and against undue risk of fire or other hazards.
- b. Safety and Resource Protection: The facility shall be operated and maintained to provide a safe environment for visitors and occupants.
- c. Functionality and Professional Environment: People and equipment will have adequate and efficiently designed space. Personnel shall have convenient physical access to facilities in accordance with the Architectural Barriers Act (ABA) standards. The interior and exterior appearance should be aesthetically pleasing and functional to enable the occupants to deliver high quality service. Exterior landscaping should be attractive and kept neatly trimmed and clean.
- d. Operations and Maintenance: The physical plant will be properly operated, repaired, and maintained. This includes preventive maintenance, repair, alteration, and replacement of the buildings and associated utility systems. Also, the facility will be operated and maintained in a manner that conserves resources, prevents contamination of the surrounding environment, and prevents injury to visitors or occupants. Any areas that do not meet current codes or regulations will be identified and managed to prevent injury, mishap, or close call.
- e. Engineering and Documentation: A copy of the documentation that meets regulatory and accreditation requirements, as well as the administrative needs of the FM program, shall be maintained. The FM should also have copies of the drawings (or documents) that show the locations of fire protection features in the facility.
- (1) Official documents shall be maintained by the Engineering Documentation Center.
- f. Disseminate the Center developed fire protection and evacuation plans to facility occupants and visitors.

- g. Ensure adequate signs are located in the interior and exterior of the facility for emergency evacuation or event.
- h. Meet the Emergency Incident Commander in a designated location during any emergency evacuation or event.
- i. Report thefts and security protection problems.
- j. Ensure that authorized access controls to the facility are properly established and maintained.
- k. Coordinate all after-hours activities through the institutional services contractor Duty Office
- I. Respond to on-call emergencies and other after-hours facility requirements.
- m. Provide appropriate warning signs for access to roof in accordance with KNPR 8715.3.
- n. Report all occupant carelessness to the appropriate supervisor or security.
- o. Follow up on any close call, mishap, or incident report associated with assigned facility and report monthly status to FMP, noting specific lessons learned and participate in the investigation if requested.
- p. Ensure the distribution of recall and hazard alert notices. Notify management to ensure personnel follow the recommended procedures and document any required corrections.
- q. Identify and take corrective action for environmental health hazards in common areas.
- r. Communicate with SI-E on health issues and ask for technical advice when necessary.
- s. Maintain a copy of safety reference materials that include appropriate NFPA guidance, NASA safety regulations, and local safety policies. The KSC SMA Institutional Division will provide any safety reference materials as requested.
- t. Ensure that posters providing NASA Safety Reporting System (NSRS) information and pamphlets are prominently displayed in facilities and provide their locations to the KSC NSRS Representative. Ensure that NSRS pamphlets are present in all poster dispensers.
- u. Provide inputs for the development and prioritization of facility project additions, alterations, or maintenance for incorporation into the integrated submittal to the NASA FPM.
- v. Participate in FM integration meetings as required by NASA FPM or requested by Program directorates.
- w. Ensure ABA compliance and report non-compliance to the NASA FPM and <u>Disability</u> Awareness and Action Working Group.
- x. Ensure compliance with space utilization standards and report noncompliance to the NASA FUO and the DFUM for resolution.

- y. Maintain cognizance of contract requirements for facility preventive maintenance and other services implemented for assigned facilities. If corrective actions are required, work with appropriate institutional contractor. If issue cannot be resolved contact appropriate NASA Functional Manager.
- z. Perform periodic inspections to ensure that the facility is being maintained and operated in a safe manner.
- aa. Review the institutional services contractor work order reports, job reports, and contract reports for the facility to monitor the status of all requests. Follow up with the institutional services contractor and NASA Functional Manager where appropriate.
- bb. Evaluate plans for all outages of any or all utilities. Coordinate with facility occupants.
- cc. Serve as the focal point for coordination and planning of all audits, surveys, and scheduled inspections on assigned facilities, and lead the resolution of all corrective actions. At a minimum, all KSC facilities shall receive an annual safety and fire survey or audit. These surveys or audits may be conducted by the FM or NASA fire protection and safety personnel as appropriate. KSC operations that require a review by industrial hygienists or health physicists may be audited more frequently.
- dd. Coordinate any required special or unscheduled inspections. Unscheduled or special inspections are conducted when the assigned inspector determines that they are necessary. This determination would occur when any operation or activity warrants immediate or special attention, which cannot be delayed until the next regularly scheduled inspection. Special operations involving human flight support and tests where a high hazard potential exists are examples of activities that could warrant an unscheduled or special inspection. These inspections may be performed at any time by NASA KSC SI-E, SI-P, FM, or FPM, etc.
- ee. Intervene as warranted when conditions pose an immediate threat to life, health, or pose a threat of damage to equipment or facilities. The FM should immediately notify the KSC SMA Institutional Division safety representative, safety hotline, SI-E Industrial Hygiene, and FPM when such a condition exists. The FPM will notify senior management.
- ff. Collect and evaluate hazard and safety practice information so the KSC SMA institutional Division and the FM can address pertinent safety issues.

CHAPTER 4 Physical Facility Management

4.1 Signs

4.1.1 Facility Identification

- a. Facility number identification shall be used at any building or facility included in the KSC real property records.
- b. Way-finding signs shall be used to identify facilities or areas which require frequent visitation by personnel other than the employees normally working at that location. Examples are:
- (1) Dispensary
- (2) Locksmith
- (3) Supply
- (4) Shipping and Receiving
- (5) Security
- (6) Pass and Identification.
- c. Facility signs shall not show the company name or logo of any NASA support contractor. Signs identifying other Government agencies, which utilize facilities within KSC, should conform to this chapter. KSC Visitor Complex (KSCVC) signs are exempt from facility sign requirements. Signage requirements for the KSCVC will be approved by the Director of Communications and Public Engagement. The KSC Press Site must conform to the KSC sign requirements for building numbers. However, the press may include affiliation logos to aid visitors in finding the proper location. The NASA Press Site Manager must approve the size and location of affiliation logos.
- d. Facilities that are entirely out-granted to a commercial entity and are commercially funded are eligible to display company logos on the exterior of out-granted facilities or as free-standing signage within the lease area after approval from the RPAO, the Master Planner, and the FMB. The out-grant agreement (e.g., lease, enhanced use lease, Space Act Agreement, etc.) shall document the provision and condition for such signage.

4.1.2 Street Name Signs

- a. Street name signs shall indicate the name identification of the street as shown on <u>KSC-PLN-8810.1</u>.
- b. Street name signs and posts shall be positioned at each intersection, mounted with their faces parallel to the streets they name, as close to the corner as practical and where they can easily be seen by motorists and pedestrians. Two assemblies (signs and posts) are required at cross streets on diagonally opposite corners. At other intersections, one assembly is required. The sign head will be slanted to the correct eye level for maximum readability.

4.1.3 Traffic Control and Roadway Signs

- a. Traffic control signs shall be located and positioned in accordance with the Manual of Uniform Traffic Control Devices established by the U.S. Department of Transportation, Federal Highway Administration and approved by the KSC Traffic Engineer.
- b. The number of traffic control signs shall be limited to the minimum essential for the safe and orderly direction and control of traffic.
- c. No other signs shall be installed that conflict with or obscure any traffic control sign.
- d. All support requests for roadside or median signs shall be submitted to the institutional services contractor Work Control.
- 4.1.4 Construction Contractor Signs
- a. Construction contractor signs shall be located as directed by the Contracting Officer.
- b. All construction contractor signs shall be reviewed and approved by the Construction of Facilities assigned project manager prior to installation.
- c. Construction contractor signs shall be furnished, erected, maintained, and removed by the construction contractor without cost to the Government. Such signs will be limited to the following information:
- (1) Contractor's name (maximum letter height: 4 inches)
- (2) Contractor's home office address (maximum letter height: 2 inches)
- (3) Contractor's local and home office phone (maximum letter height: 2 inches)
- (4) A symbol, not more than 16 inches in its greatest dimension, may be included
- d. The mounting, location, and erection of construction contractor signs shall be in accordance with requirements set forth in the contract for the specific project.
- e. Contractors and their major subcontractors shall erect signs to identify their trailers or construction offices.
- f. To facilitate deliveries made to construction sites, construction contractors may erect directional signs alongside KSC's main thoroughfares. Directional signs shall be removed as soon as they are no longer required.

4.2 Physical Space Management

4.2.1 Administrative Space

a. Physical space management shall be in compliance with NPR 8800.15, KDP-KSC-P-1304, and KDP-KSC-P-1311. This requirement applies to all organizations (except commercial or non-NASA entities that have been assigned dedicated facilities via a real property use agreement) occupying KSC-accountable real property regardless of its location.

- b. KSC will utilize the open office concept. There will be limited wall separations between work groups and no private offices except for supervisors, GS-15's, or personnel leads designated as such in their position descriptions (i.e., approved by KSC Human Resources as team or work leads). Office workspace assignments shall be in accordance with the Table A: Average Workstation Square Footage. Office cubicle paneling (less than 68 inches high per fire code for 36-inch wide aisles) is permitted.
- c. Existing walls that do not conform to approved space standards will be removed as personnel relocations, moves, and facility modifications occur. The FMB Chair approves exceptions to this rule.
- d. Recommended administrative space standards for KSC are listed below. However, contiguous administrative space by floor or organization shall conform to the following formula standard: Usable Space square feet (sf)/number of workstations within the usable space ≤ 180 sf/workstation. Usable Space is defined as the total of occupant area and building amenity area on any floor level, and for the building.

Table A: Average Workstation Square Footage

Position	Occupancy Standard
PRIVATE OFFICES	
Heads of Primary NASA & Contractor Organizations	150-200 sf
(Orgs)	
Deputy Heads of Primary NASA & Contractor Orgs	150-200 sf
Associate Director of Primary NASA & Contractor	100-165 sf
Orgs	
Chiefs of Division/Office, Subcontractor Dept. Heads	100-165 sf
Branch Chiefs, Supervisors and Technical Assistants	100-150 sf
to Directors	
Personnel Leads	100 sf
Any other private office	100 sf
NON-PRIVATE OFFICES	
Secretaries to Senior Managers and Division/Office	80-100 sf
Chiefs	
Secretaries to Branch Chiefs or Supervisors	65-100 sf
General Staff	65-90 sf

- e. Contractor and tenant personnel office space shall be assigned based on positions equivalent to the civil service positions defined above. Assignment of private office space for personnel not listed above, or for office sizes larger than listed above, will be submitted in writing by the head of a primary organization to the FMB for approval.
- f. Whenever possible, support services (e.g., mailroom, libraries, credit union, etc.) shall be placed on the first floor of a building.
- g. Corporate space is prohibited on KSC per <u>KNPD 8830.2</u>, except commercial or non-NASA entities that have been assigned dedicated facilities via a real property use agreement.

h. The total office space will be allocated based on a targeted overall KSC and directorate maximum average of 180 usable sf per person (including year-round positions such as co-ops, students, and visiting professors). The 180 sf per person includes all office personnel workstations, including personal desktop computers, printers, terminals, bookcases, desks, tables, filing cabinets, copier and facsimile machines, refrigerators, office entrances, access, and circulation areas. In addition, this space includes, but is not limited to, other personnel amenities, such as, break, storage, executive suites, and conference rooms (not accessible off a main public hallway). It does not include utility closets, stairwells, and publicly accessible hallways, conference rooms, and amenities.

4.2.2 Conference Rooms

- a. Conference space is a Center asset and shall be visible and reservable via the KSC global calendar. The FUO may assign conference space to specific organizations as primary users and managers of the space.
- 4.2.2.1 Center and directorate recurring meetings have priority for conference scheduling, followed by multi-directorate and Center-driven meetings. Conference Room Listings can be found at <u>Professional Support Team Website</u>.
- 4.2.2.2 If relocation of a previously scheduled meeting is required, the primary assigner should find an alternative conference space for the displaced meeting. If the primary assigner is not displacing the original scheduled meeting, then the displacing entity will find an alternative conference space for the displaced meeting.
- 4.2.2.3 All conference rooms shall be accessible on the KSC global calendar. Any conference space not accessible on the KSC global calendar will be subject to return to the Center space bank for reassignment.
- 4.2.2.4 Conference space shall not be incorporated into an organization's space utilization data unless it is not accessible off a main public hallway.
- 4.2.3 Storage and Warehouse Space
- a. Inventory and retention of NASA materials inventory shall be in accordance with NPR 4100.1 and NPD 4100.1.
- b. DFUMs shall notify the FUO when use, disposal, or excess of property liberates storage or warehouse space for reassignment by the FMB.

4.3 Facility Numbering Standards

4.3.1 Facility Room Numbering

- a. The appropriate contractor facility management organization shall be included in the design process for new facilities and facility modifications within existing facilities and will assign numbering or review and approve altered numbering schemas by no later than the 60% design review and prior to fire alarm programming and installation of signage.
- b. All configuration changes shall be evaluated and reapproved by the Center Services Infrastructure Branch.

- 4.3.1.1 Door number assignments shall follow one of two basic number formats:
- a. For facilities less than 5,000 sf per floor, a three-position number plus up to a two-position qualifier shall be assigned. No single- or double-digit door numbers are permitted.
- b. For facilities 5,000 sf or greater, a four-position number plus up to a two-position qualifier shall be assigned.
- c. If higher than a nine-story facility, a five-position number plus up to a two-position qualifier will be assigned.

Table B: Facility Room Numbering

Example #1: 123A1	Example #2: 1234A1	
First number (1) indicates floor.	 First number (1) indicates floor. 	
 Next two numbers (23) indicate the ninety-nine (99) possible whole numbers per floor. 	 Next number (2) represents wing. If only one wing, use zero (0). 	
Next character (A) is the first of a two-position qualifier that represents a sub room or cubicle designation within a main room off a hall. NOT to be used for exterior or main doors off a hallway.	Next two numbers (34) indicate the ninety-nine (99) possible whole numbers per wing/floor.	
Last number (1) is only used to define a double, triple, or quad cubicle or larger.	Next character (A) is the first of a two-position qualifier that represents a sub room or cubicle designation within a main room off a hall. NOT to be used for exterior doors or main doors off a hallway.	
	 Last number/qualifier (1) is only used to define a double, triple, or quad cubicle or larger. 	

- 4.3.1.2 Whole door numbers shall be assigned to every exterior and interior door off a main corridor or hallway beginning at or near the main entrance of a facility. Even numbering should be used on one side of a hall and odd on the other side.
- 4.3.1.3 Each door shall receive a unique number even if more than one door enters into a single room.
- 4.3.1.4 Door numbers using an alpha extension or suffix shall be used only within a main room. Doors off a public hallway should not be assigned an alpha extension.
- a. The alpha characters "I" and "O" shall not be used.
- b. All interior rooms, including floor-to-ceiling rooms, landscape partitions (cubicles), and Logan-wire-fence areas shall be numbered using an alpha character.

- c. If a landscape partition area numbered with an alpha extension is divided into double, triple, or quad cubicles the group shall be numbered left-to-right with an additional numerical extension beginning with one (1), e.g., 234A1.
- d. Door numbers should follow a logical path starting at the main office entrance throughout the facility being numbered. Within this logical path, no number should be greater on one side of a hall than the next number on the opposite side of the hall.
- e. To accommodate future modifications or to keep in sync with vertical stacking for multi-story facilities while numbering hallway doors, skipping one or more numbers for long distances between doors/rooms is acceptable. A helpful rule-of-thumb is to allow for a number every 10 to 15 linear feet. This same principal shall also apply to interior spaces within large rooms.
- f. When assigning door numbers to multi-story facilities, doors of vertically stacked areas, such as stairs, elevators, electrical/mechanical rooms, restrooms, and mezzanines, shall retain the same number with only the first digit changing to reflect the floor (e.g., 1230, 2230, 3230 etc.).
- g. KSC complies with the Government Services Administration-adopted Architectural Barriers Act Accessibility Standards (ABAAS). ABAAS scoping requirement F216 (https://access-board.gov/aba/#aba-f216) and section 703 (https://access-board.gov/aba/#aba-f216) apply to signage.

4.3.2 Stairwell Labeling

- a. In multi-story facilities, stairwells shall be referenced and labeled by an alphabetical letter, starting at the commonly known front of the building and proceeding clockwise around the facility. Such designations are important for evacuation plans, fire and security tactical operations, fire suppression equipment locations, etc.
- 4.3.2.1 Examples: Stair A, Stair B, Stair C, etc. The alpha characters "I ", "O", and "M" shall not be used.
- 4.3.2.2 Alphabetical stair designations do not replace any room number; they are an additional designation for the entire stairway.
- 4.3.2.3 Signage must comply with Life Safety Code, NFPA 101, Section 7.2.2.5.4, latest edition.
- 4.3.2.4 Alphabetical stairway designations will be shown on plan views for all floors.
- 4.3.2.5 Exceptions to the alphabetical designation are possible but restricted to preexisting and previously, properly labeled stairways (including posted signage) already in compliance with NFPA 101 and with the NASA Authority Having Jurisdiction concurrence.

4.3.3 Building Numbering

This section describes the requirements for building numbering and design, fabrication, and erection of signs at KSC. It does not apply to numbering or signs at Cape Canaveral Space Force Station.

- a. The real property numbering system is based on the Rand McNally Grid System. An overlay has been designed to be used in conjunction with the Facilities Master Plan. The grid blocks are numbered numerically north and south, and alphabetically east and west.
- b. Numbers placed on buildings and facilities should be six inches in height and be placed approximately five feet above the ground.
- 4.3.3.1 For uneven, textured buildings, numbers should be painted on metal sign blanks and attached to the building wall.
- 4.3.3.2 Numbers on facilities with smooth textured walls should be affixed with spray paint.
- 4.3.3.3 The numbers shall be placed on the front right corner or be viewable upon approach to the facility.
- 4.3.3.4 A facility number will be assigned after construction has begun.
- 4.3.4 Trailer Numbering
- 4.3.4.1 The following system of numbers shall be used to identify trailers:

a.	NASA-owned multi-wide trailers	TRM-XXX
b.	NASA-owned trailers	TR1-XXX
C.	NASA-leased trailers	TR2-XXX
d.	Other-Government-Agency-owned trailers	TR3-XXX
e.	Other-Government-Agency-leased trailers	TR4-XXX
f.	Construction or Contractor-owned trailers	TR5-XXX
g.	Contractor-leased trailers	TR6-XXX

- 4.3.4.2 Numbers placed on trailers will be six inches in height and be placed five feet from the trailer bottom.
- a. The identifying number shall be placed on both the front and back of the trailer.

4.4 Reserved Parking Assignment

- 4.4.1 Reserved parking assignment is in accordance with <u>KDP-KSC-P-3721</u>. Enforcement is performed in accordance with <u>KNPR 1600.1</u>.
- 4.4.2 The parking assignment process addresses both Government-owned and privately-owned vehicles, including carpools, senior management, and ABA requirements.

4.5 Designation of Operations and Maintenance and Sustaining Engineering Responsibilities

4.5.1 Turnover of operations and maintenance (O&M) and sustaining engineering responsibility for facilities, systems, and collateral equipment primarily occurs following construction or modification by the Construction of Facilities Division or other contract authority, or transition from one contract to another.

4.5.2 General provisions

- a. Turnover of O&M and sustaining engineering responsibility for facilities, systems, and collateral equipment shall be recorded by the cognizant transferring directorate on KSC Form 21-136, Turnover of O&M and Sustaining Engineering Responsibility for KSC Facilities, Systems, and Equipment. The KSC Form 21-136 documents the contract or government entity responsible for performing these services on the specified systems or equipment. The KSC Form 21-136 is not intended to address the O&M funding responsibility which needs to be separately negotiated through the NASA budget process between the transferring and receiving organizations.
- b. Determination of O&M responsibility should be jointly discussed and confirmed between the cognizant directorate and SI prior to initiation of turnover action.
- 4.5.3 Final determination of O&M responsibility will be made no later than the completion of the final design or construction contract request for proposals.
- 4.5.4 Further, the cognizant O&M organization shall be made aware of all design changes made during construction.
- 4.5.5 If the discussion reveals split O&M responsibility, each responsible directorate shall identify its respective areas of responsibility in writing to SI.
- 4.5.6 The transferring directorate shall provide a separate <u>KSC Form 21-136</u> to each O&M organization if more than one is identified. Page two of the <u>KSC Form 21-136</u> identifies the technical data being transmitted. This includes all information required to operate and maintain the transferred facilities and system (e.g., O&M manuals, as-built drawings, warranty, training documents, cut sheets, shop drawings, etc.).
- a. A system is considered acceptable for turnover provided the contractor can demonstrate that all work has been performed in compliance with the drawings, specifications, applicable codes, and regulations.
- 4.5.7 Final turnover of O&M responsibilities requires that all applicable contract documentation has been submitted, reviewed, and approved, and all final inspection punch list items have been completed and closed-out or provided an adequate disposition.
- 4.5.8 If any of these aspects are not acceptable to the receiving directorate, a memorandum is required to explain the reasons for non-acceptance and shall be forwarded to the originator of the KSC Form 21-136.
- 4.5.9 If accepted, the KSC Form 21-136 shall be returned to the originator.

- 4.5.10 Accountability for all controlled personal property will remain with the Supply and Equipment Management Officer (SEMO) until such time as the responsible directorate turns over O&M to the assigned contractor. At that time, the SEMO will transfer accountability to the appropriate contractor.
- 4.5.11 Accountability for real property and collateral equipment shall remain with the KSC RPAO.

APPENDIX A Definitions

Access Control – After-hours access to buildings and facilities is strictly controlled by security procedures promulgated by the Center Protective Services Office. Individuals accessing buildings after normal duty hours are required to possess the proper security badge and have the need for access. If security areas exist within the facility or research apparatus, access and notification requirements are governed by secure area access procedures.

Acquisition – Permanent and nonpermanent transfer of rights to real property to NASA. Permanent transfer includes facilities, systems, and equipment transferred by purchase, lease, condemnation, gift, and transfer from contractor plants, other NASA installations, or other Government agencies. Permanent acquisition is recorded as NASA-owned property in the RPMS. Nonpermanent acquisition is not recorded as NASA-owned property. It has other designations in the RPMS.

Area Plan – A document providing a graphic record of existing property, buildings, structures, and other improvements that is a subset of a larger master plan.

Collateral Equipment – Includes building-type equipment, built-in equipment, and large substantially affixed equipment normally acquired and installed as a part of a facility project; includes items meeting the General Services Administration definition of "related personal property." The removal of such equipment would impair the usefulness, safety, or environment of the facility and would involve substantial cost because of the special or unique services required for the initial installation.

Disposal – The sale, abandonment, destruction, or transfer of surplus property.

Equipment – In this document, unless otherwise stated, the word, "equipment" means "capital equipment" defined as follows: All items with an acquisition cost of \$500 or more, that have an estimated service life of one year or more, which will not be consumed in an experiment, and which can be identified as an independently operable item; i.e., it need not be integrated into another item in order to be operable.

Facility – Land, buildings, or other structures, and real property improvements, including utilities and collateral equipment.

Master Plan – A document providing a narrative, statistical, and graphic record of existing property, buildings, structures, and other improvements. It provides a report on the installation's potential and planned facility development as far into the future as current analysis and program plans will allow. It is designed to ensure the most efficient and economical use of real property resources and will provide a basis for cooperative planning with local communities, regional functions, and other Government agencies. In addition, it provides the basic point of reference for review and approval of specific projects as part of the normal budget formulation and execution process.

Office Space – Areas that have a primary function to provide physical space for desk-type operations.

Physical Space – All office buildings, storage facilities, trailers, special purpose buildings, launch areas, laboratories, checkout facilities, and all other areas of space owned or controlled by KSC, wherever located.

Private Office Space – Space with floor-to-ceiling walls and a door.

Program or Project Manager – As used in this document includes not only managers of specific programs or projects, such as the International Space Station program, but also the institutional programs.

Public Space – Corridors, lobbies, stairways, elevators, cafeterias, etc.

Real Property – Land and, generally, whatever is erected upon or affixed to the land providing the items erected upon or affixed to land have an estimated useful life of at least one year and have a cost exceeding \$5,000. The following are considered real property:

- (1) Land Includes all acquired interests in land, e.g., owned, leased, or acquired by permit, but excludes NASA-controlled easements and rights-of-way, which are under leasehold improvements.
- (2) Buildings Includes buildings owned or leased, by or on behalf of, NASA and improvements to NASA-owned buildings and installed property but excludes leasehold improvements.
- (3) Other Structures and Facilities Includes all structures and facilities and installed property owned or leased by, or on behalf of, NASA (e.g., storage tanks, gantry cranes, launch pads, blockhouses, service towers, airfield pavements, roads and bridges, railroads, monuments, sidewalks, parking areas, and fences) but excludes leasehold improvements.
- (4) Leasehold Improvements Includes improvements made by, or on behalf of, NASA to lease land, buildings, other structures and facilities, easements, and rights-of-way.
- (5) Collateral Equipment See Collateral Equipment above.
- (6) Relocatable Buildings Enclosed structures used as working space, shelter, or to store equipment and other personal property, and which are designed to be easily erected, dismantled, moved, and reused. This includes office and house trailers, prefabricated modular structures, and other similar structures.

Site Plan – A document first submitted in a request for approval for a specific use of real property (facility or land), which upon approval through the process defined in KDP-KSC-P-1303 becomes the official record of the approved use of the real property.

Space Utilization – Control of physical space, including establishing policies and standards, assignments, and releases. This includes control of the location within approved site plans as well as assignment of all trailers.

Special Purpose Space – Bulk storage areas, general warehousing areas, operational areas, machine shops, schedule rooms, documentation rooms, and communication, mechanical, electrical, and air conditioning rooms, computer rooms, control rooms, or other physical space and areas not specifically identified as office, laboratory, or public space.

Tenant Organizations – All organizations, both civil service and contractor, who report directly to another NASA Center, Department of Defense command, or other Government agency, but require space and services in or on KSC-controlled or owned facilities.

Usable Space – The total of occupant area and building amenity area on any floor level, and for the building. This space includes but is not limited to break, executive, cubicles, circulation, and conference rooms not accessible off a main public hallway.

Whole Numbers – Numbers not including an alpha character or decimal suffix.

Wing – A section of a large building, a group of rooms on one side or the other of a center hallway dividing a facility into more than one part such as front and back hallways, or any combination.

APPENDIX B Acronyms

ABA	Architectural Barriers Act
ABAAS	ABA Accessibility Standards
AMP	Asset Management Plan
CD	Center Director
DFUM	Directorate Facility Utilization Manager
EO	Executive Order
FM	Facility Manager
FMB	Facility Management Board
FMP	Facility Management Program
FPM	Facility Program Manager
FUO	Facilities Utilization Officer
FWS	Fish and Wildlife Service
KCA	Kennedy Customer Agreement
KNPR	Kennedy NASA Procedural Requirement
KSC	Kennedy Space Center
KSCVC	Kennedy Space Center Visitors Complex
NASA	National Aeronautics and Space Administration
NFPA	National Fire Protection Association
NPD	NASA Policy Directive
NPR	NASA Procedures Requirements
NSRS	NASA Safety Reporting System
O&M	Operations and Maintenance
RPAO	Real Property Accountable Officer
RPMS	Real Property Management System
sf	Square Feet
SEMO	Supply and Equipment Management Officer
SI	KSC Spaceport Integration and Services
SI-E	SI Medical and Environmental Services Division
SI-P	SI Protective Services Office
SIC	Spaceport Integration Center
SMA	KSC Safety and Mission Assurance