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Space Administration

John C. Stennis Space Center
Stennis Space Center, MS 39529-6000

SSTD-8070-0001-CONFIG Rev. F
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COMPLIANCE IS MANDATORY

John C. Stennis Space Center FACILITIES ENGINEERING DOCUMENTATION STANDARD

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1-11-17
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Central Engineering Files

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Document History Log

Change/ Revision	Date	Originator / Phone	Description
Basic	09/11/01	Jim Wolfenbarger ext. 8- 2304	Initial release - supersedes SSC STD 66-500 Rev. M, with the following changes: New document number and format per SPG 1400.1; Change signature title per NASA SSC reorganization; Change Facilities Engineering Division (FED) to Engineering Services Division (ESD); Change CADD/Documentation Supervisor to Drafting/Standards Manager; Changes as needed for new document numbers; Figure 2 revise block 3 for "EO Sheet" SORD; 1.0 new title and complete rewrite; 2.0 add ref to SWIs 8810-0003 and 8810-0012; 3.0 Responsibilities add new, Acronyms and Abbreviations move to Appendix A; 4.0 combine step c with steps b and e, change d to c; 7.2.1 add ref to SSTD 8070-0002-CONFIG; 7.3.2.1 add ref to "structural" type drawings; 7.3.2.4 add ref to "type J" drawings; 7.3.3 delete ref to types K, F, T, N and W; 7.4 delete "issuance"; 8.3.1 delete text redundant to Section 1.2; 8.3.2, 8.3.6.3, and 10.1.1 delete microfilming; 8.3.3.1 revise text and move to 8.3.5.1 and 8.3.5.2; 8.3.3.4 revise for clarity; 8.3.4.1 add new Figure 3 for EMI approval by FRB; 8.3.4.3 move EO-related text to 8.3.5.1, delete "crossing out" of change data; 8.3.5.1 step a complete revision; 8.3.5.1-f change "drawing" to "EMI"; 8.3.5.2-a change EO incorporation requirement; 8.3.9.1 add COC requirement for EMI procurements; 8.3.9.2 add dig permit (form SSC-618) and CCC 5-part card (form SSC-633); 10.1.3 change database access authority.
Admin Change Basic-1	10/03/01		In all places, change "5-part card (form SSC-558C)" to "CCC 5-part card (form SSC-633)".

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A	01/12/07	James W. Hughes ext. 8-2304	Revalidated. Updated references and amended text to reflect proper references. Corrected typographical errors throughout document. Changed titles for signatures per NASA SSC organization changes.
B	05/25/07	James W. Hughes ext. 8-2304	Deleted reference to SWI-8810-0003-FACENG per document cancellation; this document was not superseded. Deleted references to SSLP-1440-0001 per document cancellation; replaced with superseding document SPR 1440.1. Appendix A: deleted SSLP, deleted SOP, added FOOSC, and added CFO. Replaced references to NASA Engineering Services Division, Design Branch with Project Management Division throughout document per NASA organization restructure.
C	01/28/10	Jeanne Keller ext. 8-2104	Updated to conform to National CAD Standard requirements. Deleted references to SSC STD 99-006 per document cancellation; replaced with superseding document SSTD-8070-0004-CONFIG. Administrative changes. 7.0 Added All SORD drawings and revisions for acceptance are to be signed by NASA Center Operations. 7.2.1 Added New SORD drawing numbers are generated from the CEF drawing list. 7.3.2.1 Added Structural drawings. 7.3.2.7a Change Reference Sheets to Quads 7.3.2.7b Added “to quads”. 7.4 Deleted © new work cannot be put on the existing baseline drawing. These drawings shall be C, D, or F size only. Do not use “B” size drawings for EMI documents. 7.5 Deleted These drawings are type B. 8.2 Changed “other minor errors including errors of omission” with “grammatical errors.” 8.3.3 Added “in blue Ink. Changed “non-black” to “red”. 8.3.5.1a Changed “project goes to construction” to “EMI is issued for construction.” 8.3.6.3 Deleted “Approved and released through CEF” 8.3.8.1 and 8.3.9.2: change 5-part to 4-part. 9.1 Added Reports and studies are numbered by crew, fiscal year and sequence number. 10.1.1 Deleted All text/specifications that are included in

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			NASA SpecsIntact shall be presented in SpecsIntact. All specifications not in SpecsIntact shall be in the approved site word processing software. Added “conform to SSTD-8070-0002-CONFIG.”
C-1	06.09.11	Jeanne Keller ext. 8-2104	Updated references. Changed TOC to FM&O. changed Technical Monitor to COTR. 4.0c: added Engineering Change Request (ECR), Minor Service Order (MSO), Minor Maintenance Order (MMO), internal work request (IWR) and technical procedures. Added “E&TD TOC may use electronic signature for Test Complex 11xxx-Pxxx Series SORD drawings.” Throughout document where appropriate. 7.2.3a: added SORD Drawing. 7.3.2.6a: added Pipe drawings will show fluid, type pipe with line number, pipe support location and number, and number and component number. 7.3.2.6e(2): added pipe line numbers. 8.3.2 Drawing Cancellation: revised to “a. To cancel a drawing and revise it to the next revision number: 1. Write in the revision space of the title block that the drawing is cancelled and what drawing number the revised drawing will have. 2. Above the description, write the word “Canceled” 3. Crosshatch the drawing. b. To cancel a drawing that will not be revised to the next revision number: 1. Above the title block description, write the word “Canceled”. 2. Crosshatch the drawing.
D	6.30.11	J. Keller / 8-3043	Administrative change to correct revision number. See Rev. C-1 for signature approval.
E	08.23.13	J. Keller / 8-3043	Added to Section 1.2: “b. All SSC base contractor developed designs and changes to design documentation in the construction phase shall be approved and routed electronically. Electronic approvals are acceptable forms of approval. c. Off-site firms should deliver electronic files which then should be routed for on-site review and approval. Added to section 7.0 e.: “CEF shall officially issue SORD drawings.” Removed “blue ink” from Section 8.3.2b. Removed “E&TD TOC may use electronic signature for Test Complex 11xxx-Pxxx Series SORD drawings” from Sections 7.0c and 8.3.2b.

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E-1	02.11.16	C. Wolfram 8-1164	Administrative changes. Replaced “FOSC” with “SACOM” throughout document. Replaced “SWR” with “Task Order” throughout document. Replaced “TOC” with “Test Complex” when reference involved physical Test Complex area; and “SACOM,” regarding contractual and/or process references.
F	1/ 9/2017	Jo Anthony 8-2030	Completely reworked.

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1.0 INTRODUCTION

1.1 PURPOSE

This John C. Stennis Space Center (SSC) standard (SSTD) establishes the responsibilities, requirements, and practices for facility engineering documentation related to the as-built configuration control of Site-wide Operation and Repair Document (SORD) systems at the SSC.

1.2 APPLICABILITY

- This SSTD complements SSTD-8070-0002-CONFIG, and applies to all SSC NASA organizations, resident agencies, contractors, and sub-contractors involved with the design, implementation, operation, and documentation of configuration changes to SSC SORD systems and their related baseline control documentation.
- All SSC contractor developed designs and changes to design documentation in the construction phase shall be routed and approved electronically.
- Off-site firms will deliver electronic files which then shall be routed for on-site review and approval.

1.3 AUTHORITY

This SSTD shall be controlled and maintained in accordance with SSTD-8070-0005-CONFIG and Section 3.0 herein. Final authority for the approval and interpretation of this SSTD resides with the SSC Center Operations Chief, Design & Construction Project Management Division (PMD).

2.0 REFERENCES

Referenced documents shall be the latest edition unless otherwise specified.

S3-S-4220-PR2, *Central Engineering Files (CEF) Procedure*
 SOI-8040-0001-FACENG, *SSC Organization Instruction Construction Configuration Management*
 SOI-8080-0007, *SSC Test Site Drawings*
 SOI-8080-0015, *Configuration Control of Technical Systems*
 SPD 8830.4, *SSC Policy Directive Facility Design Engineering Directive*
 SPR 1150.1, *John C. Stennis Space Center Establishment of Charters Boards/Councils/Committees*
 SPR 1400.1, *SSC Document Preparation, Numbering, and Management*
 SPR 1440.1, *SSC Records Management Program Requirements*
 SSC Building Plans Manual, *Space Utilization/Facility Floor Plans*
 SSC DWG 54000-E001, 2, and 3, *SSC Electric/Electronic Legends*
 SSC DWG 54000-P001, *SSC Piping Schematic Legends*
 SSC DWG 20000-E010, *SSC Electrical Panel Instruction*
 SSTD-8070-0002-CONFIG, *SSC Facilities Drafting Manual*
 SSTD-8070-0003-CONFIG, *SSC Preparation of Procurement Specifications*
 SSTD-8070-0004-CONFIG, *SSC Preparation of Construction Specifications*

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SSTD-8070-0005-CONFIG, *SSC Preparation, Review, Approval and Release of SSC Standards*
SSTD-8070-0006-CONFIG, *SSC Component Servicing Processes and Documentation*
SSTD-8070-0009-CONFIG, *SSC Preparation of Form SSC-625, Certificate of Completion (COC)*
SSTD-8070-0010-CONFIG, *SSC Maintenance of the System Operation and Maintenance Responsibility Database (SOMRD)*
SSTD-8070-0107-IDCODES, *SSC Requirements for Numbering and Mounting Locator Plates to Mechanical Components and Pressurized Vessels and Tanks*

Forms

NASA form 1046, *Transfer and/or Notification of Acceptance of Accountability of Real Property*
NASA form 1509, *Facility Project Document (FPD)*
SACOM form 320, *Request for Service*
SSC-61, *Stennis Change Request (SCR)*
SSC-151, *Engineering Modification Instruction (EMI)*
SSC-151D, *Engineering Order (EO)*
SSC-618, *Dig Permit*
SSC-625, *Certificate of Completion*
SSC-633, *Certification/Configuration Control Card*
SSC-650, *Engineering Change Request (ECR)*
SSC-702, *Project Data Sheet (PDS)*
SSC-781, *Request for Information (RFI)*

3.0 RESPONSIBILITIES

- a. NASA SSC Center Operations Design & Construction PMD is responsible for oversight and acceptance of projects and related documentation affecting SSC facilities configuration.
- b. The Stennis Control Board (SCB) and Configuration Control Boards (CCBs) are responsible for identifying and monitoring changes to SSC facilities baseline configuration in accordance with Section 9.1 herein.
- c. Synergy Achieving Consolidated Operations and Maintenance (SACOM) Engineering Services Department (ESD) Design Engineering and Drafting are responsible for maintaining drawings identified in this SSTD in accordance with SSTD-8070-0002-CONFIG.
- d. Design and Data Management System (DDMS) is the authoritative repository for the documentation identified in this SSTD. Central Engineering Files (CEF) is responsible for the release and archive of the documentation identified in this SSTD in accordance with SPR 1440.1, and this SSTD.
- e. CEF is responsible for the creation of component locator numbers in accordance with SSTD-8070-0107-IDCODES.

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- f. NASA SSC and contractor organizations are responsible for review and approval of changes to or cancellation of this SSTD in accordance with SSTD-8070-0005-CONFIG.
- g. SACOM ESD shall support the NASA SSC Center Operations Design & Construction PMD with development, review, approval, and release of changes to or cancellation of this SSTD in accordance with SSTD-8070-0005-CONFIG.
- h. Users of this SSTD shall comply with its requirements, ensure use of the correct version of this SSTD and the documents it references, and inform the appropriate organization of needed changes in accordance with SSTD-8070-0005-CONFIG.

4.0 FACILITY DESIGN AND INSTALLATION DOCUMENTATION

- a. All design and construction projects shall have a cognizant NASA Project Manager and NASA Contracting Officer's Representative (COR) assigned by the applicable directorate.

Note: For most projects, one person can serve as both Project Manager and COR; however, a given project may have separate individuals assigned to these roles, in which case the COR supports the Project Manager.
- b. Facility drawings define the configuration and provide control documentation for roads, canals, utilities, buildings, and other primary facilities at SSC. Affected systems are identified by the SORD Family Tree system defined in Section 8.2. DDMS is the authoritative repository for this documentation.

5.0 REQUEST FOR SERVICE

- a. Persons requesting historical information from CEF are required to fill out a CEF Request for Service, SACOM form 320. (Refer to S3-S-4220-PR2.)

Note: Current documentation is available and shall be accessed via DDMS.
- b. CEF shall adhere to the following practices when considering a Request for Service:
 1. SPAN Floor Plans –NASA Real Property must approve requests for copies.
 2. CAD File requests – EMI requests are forwarded to the NASA PM over the applicable project for approval; SORD requests are forwarded to Center Operations Director for approval.
 3. Drawings showing cameras or card readers – Requests must be approved by NASA Security.
 4. SORD drawing copy requests – Copies are provided as requested.
 5. EMI drawing copy requests – Copies are provided as requested.
 6. Vendor information – Copies are provided as requested.

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7. Studies/Reports – Copies are provided as requested, unless restrictions are indicated on the physical file.

Note: If information indicates a security concurrence is required, additional permission(s) may be required, e.g., AutoCAD files cannot be provided without express written permission from NASA.

- c. CEF is responsible for informing the requestor of any other documents that may affect the correctness of the information being requested, including applicable security concurrence, and for noting on the work request if the Customer refuses the additional information. (See flow chart, Figure 1.)

Figure 1. Process Flow Chart for Customer Request of Information from CEF

