

SODIV-TG-1006  
JANUARY 1997

TECHNICAL GUIDANCE  
FOR  
SPECIFICATIONS PREPARATION

Prepared By:

SPECIFICATIONS DIVISION  
PLANNING AND DESIGN DEPARTMENT  
SOUTHERN DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
CHARLESTON, SOUTH CAROLINA

CONTENTS

1. INTENT
  2. OTHER SPECIFICATIONS GUIDANCE
  3. REQUIRED USE OF INDEX OF CRITERIA
  4. AVAILABILITY OF NAVFAC GUIDE SPECIFICATIONS
  5. INTERIM REGIONAL REVISIONS TO GUIDES
  6. SPECIFICATIONS PREPARATION
    - 6.1 Editing
    - 6.2 Preparing a Section Where No Guide is Available
    - 6.3 Proof-Reading
    - 6.4 Printing
  7. COORDINATION OF SPECIFICATIONS AND DRAWINGS
  8. BID ITEMS
    - 8.1 Basis of Bid Statement
  9. TIME FOR COMPLETION AND LIQUIDATED DAMAGES STATEMENTS
  10. QUALITY CONTROL PROVISIONS
  11. SUBMITTAL REGISTER
  12. OBTAINING INTERRUPTIONS AND OUTAGES REQUIREMENTS
  13. PROPRIETARY OR RESTRICTIVE SPECIFICATIONS
  14. USE OF "OR EQUAL" SPECIFICATIONS
  15. EXPERIENCE CLAUSES
  16. SELECTION OF MATERIALS
  17. BUY AMERICAN ACT
  18. CONSTRUCTION CONTRACT AMENDMENTS
- APPENDIX I - USE OF SPECSINTACT SYSTEM

## SODIV-TG-1006

1. **INTENT**: The purpose of this document is to provide guidance to designers that prepare construction specifications for Southern Division, Naval Facilities Engineering Command (SOUTHDIV).

2. **OTHER SPECIFICATIONS GUIDANCE**: For additional guidance refer to the latest revision of:

- (a) SOUTHDIV P-141, "Guide for Architect-Engineer Firms Performing Services for the Southern Division, Naval Facilities Engineering Command"
- (b) MIL-HDBK-1006/1, "Policy and Procedures for Project Drawings and Specification Preparation"

This (Technical Guidance) document will be updated frequently, however, the documents listed above will be updated much less frequently. Consequently, if there is a conflict between this document and documents listed in the above paragraph, this document shall govern.

3. **REQUIRED USE OF INDEX OF CRITERIA**: The designer shall prepare project specifications utilizing the NAVFAC guide specifications listed in the current "SOUTHDIV Index of Criteria" (Guide 00001), and other criteria as may be provided by the SOUTHDIV Project Manager (PM). The "Index of Criteria" is updated every three months and can be obtained from the SOUTHDIV electronic bulletin board, 803-820-7411.

4. **AVAILABILITY OF NAVFAC GUIDE SPECIFICATIONS**: The Compact Disc-Read Only Memory (CD-ROM) system titled "Construction Criteria Base" (CCB), distributed by the National Institute of Building Sciences (NIBS), includes practically all of the NAVFAC guide specifications listed in the Index of Criteria. See SOUTHDIV P-141, Section 8, for information on obtaining the CCB. SOUTHDIV will not provide copies of NAVFAC guide specifications on any media.

5. **INTERIM REGIONAL REVISIONS TO GUIDES**: SOUTHDIV maintains a set of Interim Regional Revisions which modify some NAVFAC guide specifications. These revisions are updated every three months to coordinate with NAVFAC guide specifications on the latest CCB disks and shall be incorporated, as applicable, into project specifications. Electronic copies are available from the SOUTHDIV electronic bulletin board. Paper copies will be furnished when requested by the A/E.

6. **SPECIFICATIONS PREPARATION:** Project specifications shall be prepared utilizing the "SPECSINTACT" system of the CCB. Note the emphasis on the requirement to use the "SPECSINTACT" system; merely subscribing to CCB and then developing specifications by any other method, other than "SPECSINTACT", will NOT be acceptable. See Appendix I "Use of SPECSINTACT System."

Obtain the latest "SOUTHDIR Index OF Criteria" and Interim Regional Revisions prior to starting development of a project specification. Most Guides will come from the "NAVY" Master database of the SPECSINTACT System, however, SOUTHDIR has a few Regional Guides that are located in the "SOUTHDIR" Master database. The "Index of Criteria" will indicate whether a NAVFAC or SOUTHDIR regional guide should be used. Additionally, the designer shall incorporate all applicable SOUTHDIR Interim Regional Revisions, and any other pertinent specification information that the SOUTHDIR Project Manager may provide.

The A/E does not normally prepare any of the Division 00 Sections, except for Section 00102, List of Drawings. SOUTHDIR Contracts Department will prepare all other Division 00 sections as may be required for the particular project. Design/Build projects are the exception, requiring preparation of other Division 00 sections.

6.1 **Editing:** Each specification section shall be thoroughly edited to suit the project, and coordinated with the project drawings. Add necessary wording and delete superfluous paragraphs or wording. Do NOT list a paragraph number and title followed by "NOT USED"; instead, delete entire paragraph and allow the SPECSINTACT system to re-number paragraphs. When adding paragraphs, special characters and tokens must be included in order to take advantage of the automated features of SPECSINTACT; see the SPECSINTACT User's Guide for details.

6.2 **Preparing a Section Where No Guide is Available:** Prepare section using best available, non-proprietary, information from several manufacturers. Using the SPECSINTACT system, pull a Section Template (NAVYSECT), with notes, into job. Prepare section utilizing the instructions and examples provided in the Template for text layout, special characters and tokens.

6.3 **Proof-Reading:** Specifications shall be proof-read before submitting to SOUTHDIR. When typists are not experienced in reading engineering and architectural terms, the proof sheets should be reviewed by technical personnel.

6.4 **Printing:** See Appendix I.

7. **COORDINATION OF SPECIFICATIONS AND DRAWINGS**: The importance of complete coordination between the drawings and specifications cannot be over-stressed. These elements of the contract package CANNOT be developed separately and then merged at the last moment. It is necessary for the specifications preparers to review the drawings during and after their completion, to assure that everything indicated on the drawings is covered in the specifications and that those methods, materials and procedures required to accomplish the work but which cannot be (or are not) shown on the drawings, are described in the specifications. Conversely, those preparing drawings should review the specifications to assure complete coordination. Quite often a simple detail, section, or note on the drawings will make it possible to eliminate substantial descriptive material from the specifications.

- a. The drawings should indicate:
  - (1) Architectural and engineering design.
  - (2) Plans, elevations, details and all essential dimensions.
  - (3) Designation of each portion (detail, section, diagram, etc.) by title or symbol, to allow reference to it.
  - (4) Notes giving the basic design data, such as assumed loads, allowable stresses, and ratings.
  - (5) Limits of work.
  
- b. Specifications shall include information governing:
  - (1) Materials, installation and workmanship.
  - (2) Inspection and tests.
  - (3) Contractual requirements.
  - (4) Information not supplied by the drawings.

Terminology used in specifications and on the drawings should be the same. If the terminology used on the drawings should vary and revision of the drawings is not practicable, the specifications must reconcile such differences in a manner similar to the following: "Hollow tile (noted as 'clay tile' and 'terra cotta tile')". The Specification should be cross- checked with the drawings to verify that no conflicts or ambiguities exist and that each reference to drawings in the specifications includes the phrase "as indicated".

## SODIV-TG-1006

8. **BID ITEMS**: NAVFAC has established as a basic policy that only ADDITIVE bid items may be used in projects; deductive bid items shall not be used. The designer shall consult with the SOUTHDIV Project Manager in setting up additive bid item structure.

- a. When the estimated construction cost is in excess of approximately 90% of the authorized construction funds, additive bid items should be provided, in order to maximize chances of awarding the contract.
- b. Design projects so that the Base Bid (Bid Item 1) will provide a usable facility which will satisfy the requirements of the using Command.
- c. Non-cumulative, independent, additive bid items may be specified that will provide additional desired features, that are within the Scope, when added to the Base Bid.
- d. Try to limit additive bid items to two; the maximum allowable number of additives shall be four.
- e. Additive bid item costs, relative to the funds available, should be in the range specified in "SOUTHDIV TG-1010, Technical Guidance for Cost Engineering".
- f. Additive bid items shall be set up in the order of DESCENDING PRIORITY, i.e., the most desirable feature to be added must be Bid Item 2, the next most desirable as Bid Item 3, etc.
- g. The Base Bid alone, and the Base Bid plus any single or combination of additive items, shall result in a complete and usable facility.
- h. Elements of each additive bid item shall be readily identifiable on the drawings; if it is necessary to clarify additives on the drawings, they shall be designated as "Additive Bid Item". Normally bid item numbers should not be shown on the drawings to avoid coordination problems should the bid items be re-arranged later. The Basis of Bid statement is used to describe the work that is contained in each additive bid item.
- i. Bid items categorized as "option" items may be permitted but, in each case, approval to use "option items must be approved in advance by the SOUTHDIV PM. An option item is a portion of the work that can be awarded during some specified interval after the initial contract award.

8.1 **Basis of Bid Statement**: The designer shall, at the 100% submittal, and all succeeding submittals, properly complete and submit a BASIS OF BID STATEMENT using SOUTHDIV Guide 00009. Should it be necessary to include "unit priced" items, use Guide 00010 in lieu of 00009. The information on this form shall clearly reflect the bid item structure for the project, and shall be coordinated with all bid item information shown on the drawings and the cost estimate. SOUTHDIV will use this information for preparing the "Instruction to Bidders" Section of the contract documents.

9. **TIME FOR COMPLETION AND LIQUIDATED DAMAGES STATEMENTS:** The designer shall, at the 100% submittal, and all succeeding submittals, complete and submit a TIME FOR COMPLETION STATEMENT, and a LIQUIDATED DAMAGES STATEMENT, utilizing the forms contained in SOUTHDIV Guides 00007 and 00008, respectively. These statements will be utilized by SOUTHDIV when preparing Division 00 sections of the contract documents.

10. **QUALITY CONTROL PROVISIONS:** Section 01450, "Quality Control" shall be prepared by the designer using a marked-up Section 01450 guide specification provided by SOUTHDIV. This marked-up section will be provided (for each project) to the designer by the SOUTHDIV Project Manager; should it not be received, request it prior to beginning preparation of the 100% specifications.

11. **SUBMITTAL REGISTER:** The designer shall generate a Submittal Register, using the "SPECSINTACT" system of the CCB. Column titled "GOVT OR A/E REVIEWER", of this computer generated Submittal Register shall be filled in by the designer, utilizing information from SOUTHDIV Guide 01031 "Instructions/Procedures for Construction Contract Submittals". This completed Submittal Register shall be included as an attachment to "Submittal Procedures" section of the project specification. See Appendix I for information on how to indicate approval authority for submittals.

12. **OBTAINING INTERRUPTIONS AND OUTAGES REQUIREMENTS:** For construction projects which involve interruptions of existing building operations or major utility outages, it is the designer's responsibility to discuss the required outages and interruptions with the appropriate Activity Public Works and Operations personnel and establish a construction schedule in the Specifications for these interruptions.

13. **PROPRIETARY OR RESTRICTIVE SPECIFICATIONS:** Do not use unless it is established conclusively that no substitute serves the purpose. Specifications shall be written to permit bidding by suppliers whose equipment provides the functional, technical, and physical requirements of the project. Proprietary requirements shall not be included in specifications without written approval by the Contracting Officer. When a proprietary product is proposed for use it shall be fully justified as early as possible, in writing, to the SOUTHDIV Project Manager. The justification shall include a complete description of the product, including the name, model, and manufacturer's address. It shall also include the reason(s) for the proposed proprietary specification. Such reasons are generally related to one of the following:

- a. Safety

SODIV-TG-1006

- b. Health
- c. Substantial cost savings
- d. One-of-a-kind product with no equivalents
- e. Continued operation of existing vital equipment.

When a proprietary specification has been authorized by the Government, the project specification shall state: "Notwithstanding any other provision of this contract, no other product will be acceptable."

14. **USE OF "OR EQUAL" SPECIFICATIONS**: The practice of specifying items by naming acceptable commercial products followed by the words "or equal" shall not be used unless written, Level III Contracting Officer approval has been obtained. "Or equal" approval may be authorized for the following situations:

- a. There are no industry or Government-type Specifications for the item
- b. The item is a minor part of the work
- c. The item cannot adequately be described because of its technically involved construction or composition.

When an "or equal" specification is proposed for use it shall be fully justified as early as possible, in writing, to the SOUTHDIV Project Manager. If manufacturers' names and trade designations are used, a minimum of three manufacturers shall be included as a part of the required description followed by the words "or equal". The essential features of the item must be set forth in sufficient detail to establish the basis upon which the equality of non-listed products will be determined.

15. **EXPERIENCE CLAUSES**: Experience clauses shall not be included in the body of technical specifications, unless the clauses are existing in the NAVFAC guide specifications (which means they have been pre- approved), or, unless Level I Contracting Officer approval is first obtained. Should the designer desire to add an experience clause, for either contractor or equipment experience, he must provide full justification, in writing, to the SOUTHDIV Project Manager in time to allow for processing and a decision before the final submission.

16. **SELECTION OF MATERIALS**: The Government, through its various agencies has, and may place, restrictions on the use of certain materials. It is advisable to INVESTIGATE THOROUGHLY new materials which have not been proven in the specific type of service involved, and whose promotion is based upon unsupported statements and lists of supposedly satisfied users. Materials shall be used in a manner which will afford the maximum service at the lowest comparable cost. Life-cycle (operation and maintenance) costs shall be weighed against

## SODIV-TG-1006

initial costs to achieve maximum economy. Before deciding upon a specific material for design or specification purposes, the following shall be considered:

- a. Contemplated life of the construction
- b. Climatic and operating conditions
- c. Fire-Resistance, Flame-Spread and Smoke-Developed Ratings.
- d. Will the material be used to the best advantage under contemplated conditions of use
- e. Is the material a stock item or does it require special processing
- f. Is material proprietary
- g. Is the material or any of its ingredients scarce or critical in the area of usage
- h. Transportability of the material.
- i. Is the material produced within the United States or its possessions (Refer to Buy-American Act)

The use of new materials and techniques which have gained commercial acceptance is encouraged whenever it will result in economies or increased utility.

17. **BUY AMERICAN ACT**: Guide specifications provided to the designer are written to adhere to the Buy American Act. Designer shall ensure that specifications for materials and equipment that he prepares also meet this Act.

18. **CONSTRUCTION CONTRACT AMENDMENTS**: When the designer is required to prepare necessary contract amendments after the project has been advertised for bids, or during construction of the project, he shall utilize the SOUTHDIV Guide 01007 titled "Amendments to Drawings and Specifications".

## APPENDIX I - USE OF SPECSINTACT SYSTEM

This Appendix provides basic instructions for use of SPECSINTACT. The SPECSINTACT "User's Guide" and "Editor Manual" must be consulted for detailed instructions.

A. **SET UP:** When setting up a new job, enter the specification number without dashes when asked for the "job name" or "new job ID", e.g.: 06960401 (for specification number 06-96-0401). For the job title, enter the project name as a minimum, and include the project location if possible. Enter this information in all caps and abbreviate as necessary to limit heading to 66 characters, even though the set up screen allows more than 66. SPECSINTACT prints the project title and specification number at the top of each page as a header exactly as entered in the job set up screen.

B. **EDITING:**

1. Guide specifications provided with the SPECSINTACT (SI) automated specification system include special symbols ("tokens" or "tags") which are used for automated operations. Do not manually delete these special symbols from project specifications when editing in SPECSINTACT, unless the associated text is also being removed.

2. The guide specification date is centered on the line immediately following the section title. Do not delete this date.

3. Guide specifications provided in CCB for use with SPECSINTACT have their margins set for one-inch top, bottom, left and right margins when printing. They provide the desired format for most laser printers when printing through MS Windows. Do NOT use "right justified" margins.

4. Specification section titles, paragraphs, sub-paragraphs and text arrangements are included in the SPECSINTACT system data.

5. Do not manually renumber paragraphs during editing.

6. Utilize SOUTHDIV Instruction 01031 to determine the appropriate approval authority for items requiring submittal by the construction contractor. In each technical section, on the line for each item requiring Government approval, add a "G" and a "pipe" symbol (|) followed by the designation for the approving authority as listed in 01031 (i.e.; OIC, A/E, or EFDxxxx). This added text must be surrounded by tokens (\\* \*) in non-SGML or tagged independently in SGML to generate a complete submittal register for the project bid package. For example, following an item that is to be submitted and reviewed by the A/E the tokenized text would be: \\*G|A/E\*\ in non-SGML. In SGML (with tags revealed) the added text would look like this:  
<sub>G|A/E</sub>.

7. At the end of each section of the specifications, the following appears, two lines below the end of the text, and indented 5 spaces: -- End of Section --

To prevent "-- End of Section --" from appearing on the last page by itself when using the Windows non-SGML SPECSINTACT program, the "..NEED" command should remain in the text. If sketches or forms are included with a section, place the "-- End of Section --" marker on the last sketch or form.

8. Lay out the cover sheet (signature page) as shown in NFGS guide specification 01110 "Summary of Work." (A "Format Template" may be set up for this purpose.) Insert the appropriate contract and specification numbers in the indicated locations. Do not include the "job title and ID" header on the cover sheet. Do not place a page number on the project cover sheet.

C. **PRINTING**: Letter quality print is required.

1. Do not use dot matrix printers.
2. Print specifications using Prestige Elite type (12 characters per inch) in upper and lower case. Other similar, "laser" quality, fonts may be acceptable if approved. Such type styles as all capitals, script, and bold text are not acceptable.
3. Select the "Project Table of Contents" option to provide a Table of Contents, produced and printed by SPECSINTACT. Insert this Table of Contents immediately following the Cover Sheet in the originals.
4. Do **NOT** select "Section Table of Contents" option.
5. Notes must be deleted from project specifications. Make the proper selection to ensure notes are not printed.
6. Select the "Renumber paragraphs" option.
7. Select "Reference Reconciliation" to remove unused references.
8. Make the proper selection to ensure the section date remains in the printed text.
9. Select the appropriate option to delete tokens.
10. Select the "Page number by section" option to produce a new page at the beginning of each section.
11. The specification will be printed with the project name and number as a header in the top margin and the section-page number as a footer in the bottom margin of each page. Refer to paragraph "SET UP", above, for headers and footers.

Example of project name and number header:

REPAIRS TO CONCRETE PAVING, NAS, MEMPHIS, TN            06960401

Example of section-page number footer:

SECTION 03300 PAGE 1

12. When corrections are required, make changes in the SPECSINTACT job and reprint the section changed. The use of other methods of correction, including "cut-and-paste", is not acceptable.

13. Avoid unnecessary handling of the originals to reduce smudges.

14. Submit a SPECSINTACT "Job back-up" of the project, including an electronic copy of the Submittal Register on 3-1/2 inch floppy disk(s). Do NOT use DOS "Backup" or Windows file manager for this purpose.

15. Provide extra review copies as required by contract. Do not reproduce review copies two-sided.

**D. QUALITY ASSURANCE:**

1. The SPECSINTACT system can generate several useful reports to help insure the quality of the specifications. Bracket verification, section verification, and submittal verification should always be run after editing of the job is complete. The Submittal Register can also be used to find errors that often occur as a result of improper noting (tokens/tags) of submittal information. Check the column titled "Paragraph No." to insure there are no blanks. Correct errors prior to submitting specifications to SOUTHDIV.

2. Provide a QA review of the printed specification to avoid inadvertent omissions of entire sections, individual pages, forms, or attachments.