editspec

Basic Procedures Manual

Automated Construction Specification System
The EDITSPEC System is an automated system designed to produce construction specifications from Corps of Engineers Guide Specifications. The System uses one central computer and a communications network to provide remote terminal access by Corps offices, nationwide to a central data base.

The purpose of this manual is to provide a written description of procedures required to apply EDITSPEC to produce construction specifications. The EDITSPEC system provides many different methods to perform each procedure. Only the simplest method is presented. Also included are procedures for the specification writer in preparing specification sections.
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INTRODUCTION

1. PURPOSE.

The purpose of this manual is to provide a written description of procedures required to apply EDITSPEC to produce construction specifications. The EDITSPEC system provides many different methods to perform each procedure. Only the simplest method is presented. After mastering the commands mentioned in these procedures, the complete EDITSPEC user manual should be studied to learn other applications for performing assigned tasks. Also included are procedures for the specification writer in preparing specification sections.

2. EQUIPMENT.

The characteristics of the computer terminals required to interact with the EDITSPEC system and produce an acceptable product are as follows:

a. ASCII code
b. Upper and lower case
c. Twelve characters per inch
d. Six lines per inch
e. Solid characters
f. One hundred and thirty-two characters per line width

The Government has a requirements contract for a Qume Sprint 5 Series terminal, manufactured by the ALANTHUS Corporation, Rockville, MD. Each Corps office performing military construction will be furnished a copy of this requirements contract. A delivery order may be written for terminals, as needed.

3. COMPUTER SERVICES.

The Government maintains a unit price requirements contract for all computer services. Each Corps office will be furnished a copy of this contract, to which a delivery order may be written for computer services.

4. EDITSPEC ACCESS.

a. User ID. The Government maintains the EDITSPEC system. Supervisory access to the system will be given to the Chief of Specifications. The Chief of Specifications can give access to supervisors and users under the Chief of Specifications control. A unique two-digit preassigned prefix will be provided each Corps office to be used for all user identification numbers assigned. This prefix must be used by all personnel.
b. Account Numbers. One EDITSPEC account number will be given to the Chief of Specifications. The Chief of Specifications can give supervisors and users access to this EDITSPEC account number. When specifications are developed by Architect-Engineer firms, the project specification writer must provide the government reviewer access to all the project sections for review and approval. All documents (sections) related to the same project are assigned the same first four prefix characters in the twelve character document name. The Government will provide the four characters to be applied when a project is being prepared by an Architect-Engineer. (Example: The Corps of Engineers Guide Specifications have a prefix "CEGS").

c. Data Sets. Each data set, in the EDITSPEC system, is identified by a unique six-character name. The first two characters of the name indicate the Government office for which the project is being designed. The third and fourth characters indicate the project and the fifth and sixth characters are used to indicate data sets within the project.

The digits '0', '1', '2', and '3' are not valid characters for the first character of the project data set name. The characters '0' and '1' are used to indicate active guide specification data sets. The characters '2' and '3' are used to indicate inactive or superseded guide specification data sets.

5. PROBLEM SOLVING.

The Government maintains a HOT LINE to help solve problems and answer questions. All users are encouraged to use this service to improve productivity and to learn the EDITSPEC system as quickly as possible.

HOT LINE: 205-895-5229 (Commercial)
8-873-5229 (FTS)
PROCEDURE 1
ENTER AND EXIT THE EDITSPEC SYSTEM

1. GENERAL DESCRIPTION.

In order to get into EDITSPEC two logons are required. First you must logon in the time sharing operation and answer the questions that the computer will ask you. There will be three questions before the user can logon to EDITSPEC as shown below.

2. PROCEDURES.

System responses are typed in upper case letters. The user types the answers to the questions in lower case as specified after the word 'Type:'.

Step 1. Dial the phone number for the computer. Upon hearing the tone of the computer, connect the telephone to the modem.
Depress Return Key (Return).

Step 2. Type: tso (to enter the time sharing operation)
Return
WELCOME TO NVIP
PLEASE SIGN ON
NOTE: You are now ready to logon to time sharing operation.

Step 3. Type: logon_user id/password_size(2500)_a(account number)
Return
'USER ID' LOGON IN PROGRESS AT 'CURRENT TIME' ON 'CURRENT DATE'
*** WELCOME TO N.V.I.P. 033d TIME SHARING OPTION ***
*** USE THE NEWS COMMAND FOR CURRENT INFORMATION ***
**** news was updated as of 'DATE UPDATED' ********
******************************************************************************
***** THE DATE IS: 'CURRENT DATE' ************
***** THE TIME IS: ' CURRENT TIME' ************
******************************************************************************
DO YOU WANT TO INPUT DATA FROM THE DISKETTE
ENTER YES OR NO

Step 4. Type: no
Return
DO YOU WANT A LIST OF THE .OUT. DATA SETS?
Enter 'NO' TO PROCEED DIRECTLY TO EDITSPEC
Step 5. Type: no
Return
DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
ENTER 'NO' TO PROCEED TO THE LISTING OF THE DOCUMENT DATASETS
ENTER 'YES' TO PROCEED DIRECTLY INTO EDITSPEC

Step 6. Type: yes
Return
NOTE: There will be a short wait before the date is
typed followed by a carriage return and a period.
The period is your prompt to logon to EDITSPEC.

DATE: 'CURRENT DATE'

Step 7. Type: .logon user id;account number;password.
Return

*** USER LOGGED-ON TO EDITSPEC SYSTEM.
THE PRESENT TIME IS 'CURRENT TIME'
THE PRESENT DATE IS 'CURRENT DATE'

NOTE: After this message, a period will be printed which
is your prompt to enter a command. The period will be
printed each time the computer has processed a command
in EDITSPEC to let you know it is now ready for the
next command. You will remain in EDITSPEC until a logof
command is issued.

Step 8. Type: .logof.
Return

*** USER LOGGED-OFF EDITSPEC SYSTEM.

***END-OF-INPUT ENCOUNTERED.
*******JOB HAS BEEN TERMINATED *******
DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS(YES OR NO)

Step 9. Type no
Return

NOTE: There will be a short wait before the system response.

DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS
ENTER NO TO PROCEED WITH LOGOFF

Step 10. Type no
Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)
Step 11. Type no
Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

Step 12. Type yes
Return

DO YOU WISH TO LOGON WITH ANOTHER ID?

Step 13. Type no
Return

TIME-'CURRENT TIME' CPU-'CPU TIME' SERVICE-'SERVICE NUMBER' SESSION-'TIME'
DATE-'Current Date'

************************************************************
****** THE CONNECT TIME IS LISTED AS SESSION ON ******
****** THE ABOVE LINE. THE CONNECT TIME CHARGE ******
****** IS 13 CENTS/MINUTE ******
************************************************************
TOTAL SYSTEM RESOURCES USED FOR THIS SESSION
EXECUTION WAS DURING NORMAL WORKING DAY
THE CPU TIME IN HUNDREDTHS OF SECONDS: 'CPU TIME'
THE EXCP COUNT (IO): 'EXCP COUNT'
THE COST ASSOCIATED WITH CPU AND EXCP UTILIZATION IS: 'COST'
'USER ID' LOGGED OFF TSO AT 'CURRENT TIME' ON 'CURRENT DATE'
LAST STEP COMPLETION CODE WAS USER 000

Session Complete
PROCEDURE 2
CREATING EDITSPEC ACCOUNT NUMBERS,
USER ID'S, AND GRANTING ACCESS

1. GENERAL DESCRIPTION.

All resources, including account numbers and user id's, must be easily
identified with the user's office/agency. The first two characters of all
account numbers, user id's, data set names, and document names are mandatory
and indicate the office controlling resources.

2. ACCOUNT NUMBERS.

The account numbers are usually related to projects. The third and
fourth characters are mandatory and indicate the standard project
identifier. The fifth through the twelfth characters are optional and can
be applied in any manner such as subaccounting information by division,
branch, and section. One example is as follows:

acco_99 mx 01 02 1.

Specification Section
Spec. and Est. Branch
Engineering Division
Mix Plant (project)
Office (Peoria)

3. USER ID.

Users are divided into two categories, supervisors and nonsupervisors.
Each user has a unique id up to twelve alphanumeric characters, and should
be related to the organizational structure of the office. The first two
characters are mandatory; i.e., characters 1 and 2 are used for the office
designation, 3 and 4 should be used for the office location. The remaining
alphanumeric characters (5 thru 12) may be used. An example of the 12
alphanumeric character id is as follows:
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<th>Character</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
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<td>1-2</td>
<td>Office</td>
<td>99 (preassigned id for Peoria)</td>
</tr>
</tbody>
</table>
| 3-4       | Location   | 00 inhouse  
            | 01 Contractor No. 1  
            | 02 Contractor No. 2 |
| 5-6       | Division   | 01 Engineering |
| 7-8       | Branch     | 02 Specs and Estimate |
| 9         | Section    | 1 Specs |
| 10-12     | Personnel  | abc |

**COMMAND**

.user 990001021abc.

4. ACCESS:

The user must be given access to previous account numbers by the access command (.acce). Only a supervisor having access to an account may grant access to another user. Supervisor 99mx01021aaa wishes to grant access to a new user.

**COMMANDS**

.acco 99mx01021.

.user 990001021abc.

.acce ;99mx01021;990001021abc.
PROCEDURE 3
SENDING MESSAGES WITHIN EDITSPEC

1. GENERAL DESCRIPTION.

The .mess command is used to send a message to another EDITSPEC user. The user will receive the message as soon as a .logon or .logof command is issued.

2. COMMANDS.

```
user to receive message

.mess 990001021abc;(A new guide specification
.CEGS-16415, superseding CE-301.01 is in
.the EDITSPEC system and available for use.).
```

message
PROCEDURE 4

OBTAIN A CURRENT COPY OF A CORPS OF ENGINEERS GUIDE SPECIFICATION FOR TEXT EDITING

1. GENERAL DESCRIPTION.

The user has a requirement for an up-to-date copy of guide specification CEGS-04200 to be used in project "99mx". In order to automatically receive all messages/notices of changes to the guide specification, a .noti command will be issued as soon as the user has logged into EDITSPEC.

2. PROCEDURES:

System responses are typed in upper case letters. The user types the answers to the questions as specified after the word 'Type:'.

Step 1. Dial the phone number for computer.
Depress Return Key (Return) .

Step 2. Type: tso (to enter the time sharing operation
Return
Welcome to NVIP
PLEASE SIGN ON

Step 3. Type: logon_user id/password_size(2500)_a(account no.)
Return

'User ID' LOGON IN PROGRESS AT 'CURRENT TIME' 'CURRENT DATE'
*** WELCOME TO N.V.I.P. 033d TIME SHARING OPTION ***
*** USE THE NEWS COMMAND FOR CURRENT INFORMATION ***
**** news was updated as of 'DATE UPDATED' ****
*******************************************************************************
***** THE DATE IS: 'CURRENT DATE' ******************************
***** THE TIME IS: 'CURRENT TIME' ****************************
*******************************************************************************

DO YOU WANT TO INPUT DATA FROM THE DISKETTE
ENTER YES OR NO

Step 4. Type: no
Return

DO YOU WANT A LIST OF THE .OUT. DATA SETS?
Enter 'No' To Proceed directly to EDITSPEC

Step 5. Type: no
Return

DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
Enter 'No' To PROCEED TO THE LISTING OF THE DOCUMENT DATA SETS
Enter 'Yes' To PROCEED DIRECTLY INTO EDITSPEC
no - to proceed to the listing of the document data sets
yes - to proceed directly into EDITSPEC

4-1
Step 6. Type: yes
Return
Type the following EDITSPEC commands to receive messages and notice changes to the guide specification.

Step 7. Type: no
Return
.spec writer user id; spec writer account number; password.
.noti (cegs04200.00).
.logof.

*** USER LOGGED-OFF EDITSPEC SYSTEM.
***END-OF-INPUT ENCOUNTERED.
DO YOU WANT TO LIST ANY OF THE DOCUMENT DATA SETS (YES OR NO)
(unformatted working copy and printed formatted version created by the .gs command).
no - to continue logoff procedure
yes - to list document data sets

Step 8. Type: yes
Return
DO YOU WANT TO LIST CATALOG OF THE DOCUMENT DATA SETS
no - no catalog listed
yes - catalog will be listed immediately

Step 9. Type: no
Return
DO YOU WISH TO REVIEW ANY OF THESE DATA SETS
ENTER 'NO' TO PROCEED WITH LOGOFF PROCEDURE
yes - to review data sets
no - to proceed with logoff procedure

Step 10. Type: yes
Return
WHICH DATA SET DO YOU WANT TO LIST?
THE DATA SET NAME IS OF THE FORMAT
YYYY.EDTSPC.GUID.CL.PXXXXX.PXXXXX OR
YYYY.EDTSPC.GUID.D1.PXXXXX.PXXXXX WHERE
THE YYYY IS THE CREATOR ID FOR A SET OF DOCUMENTS
THE FIRST SIX X'S ARE THE FIRST 6 CHARACTERS OF THE DOCUMENT NAME AND
THE LAST SIX X'S ARE THE LAST SIX CHARACTERS IF THEY EXIST
NOTE THAT ANY PERIOD(.) IN THE DOCUMENT SHOULD BE CHANGED TO AN ALPHABETIC P I.E. CEGS.00 IS CEGSPOO

Step 11. Type: e795.edtspc.guid.cl.pcegs04.p200p00 (for working copy of an OCE guide specification)
Return
yes - if data set name is correct  
no - if data set name is incorrect  
The system will respond with the message 'REENTER THE  
DATA SET NAME'. The user reenters the data set name until  
a 'yes' is issued, verifying that the data set name is  
correct.)

Step 12. Type: yes  
Return

IF YOU WANT THIS DATA SET PRINTED AT CENTRAL SITE ENTER 'C'  
IF YOU WANT THIS DATA SET PRINTED AT THIS TERMINAL ENTER 'T'

c - central site printing (The system will submit a job  
number.)  
t - immediately printed at terminal

Step 13. Type: t  
Return

LISTING OF DATA SET STARTS AT: 'CURRENT TIME'  
(C1 DATA SET LISTED)  
LISTING OF DATA SET ENDS AT: 'CURRENT TIME'  
DO YOU WISH TO REVIEW OR DELETE ANY OTHER DATA SETS?  
ENTER 'NO' TO CONTINUE WITH EDITSPEC

yes - another document data set needs to be listed  
(loops to question 'WHICH DATA SET DO YOU WANT TO LIST?')  
no - continue with EDITSPEC or the logoff procedure

Step 14. Type: no  
Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATA SETS  
ENTER NO TO PROCEED WITH LOGOFF

Step 15: Type: no  
Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 16: Type: no  
Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)  
IF 'NO' WILL RETURN TO EDITSPEC

Step 17: Type: Yes  
Return

DO YOU WISH TO LOGON WITH ANOTHER ID?
Step 18: Type: no
Return

TIME-'CURRENT TIME' CPU-'CPU TIME' SERVICE-'SERVICE NUMBER' SESSION-'TIME'
DATE-'Current Date'

******************************************************************************
***** THE CONNECT TIME IS LISTED AS SESSION ON *****
***** THE ABOVE LINE. THE CONNECT TIME CHARGE *****
***** IS 13 CENTS/MINUTE *****
******************************************************************************
TOTAL SYSTEM RESOURCES USED FOR THIS SESSION
EXECUTION WAS DURING NORMAL WORKING DAY
THE CPU TIME IN HUNDREDTHS OF SECONDS: 'CPU TIME'
THE EXCP COUNT (10): 'EXCP COUNT'
THE COST ASSOCIATED WITH CPU AND EXCP UTILIZATION IS: 'COST'
'USER ID'LOGGED OFF TSO AT 'CURRENT TIME' ON 'CURRENT DATE'
LAST STEP COMPLETION CODE WAS USER 000
PROCEDURE 5

OBTAIN A COPY OF CE GUIDE SPECIFICATION AND DESIGN CONDITION CHECKLIST FOR AUTOMATIC GENERATION

1. GENERAL DESCRIPTION.

A specification writer has requested an up-to-date copy of CEGS-04200 and the design condition checklist to be used to produce a project section. As soon as the operator enters the EDITSPEC system a .noti command must be given to enable the specification writer to receive all messages and notice changes related to CEGS-04200.

2. PROCEDURES.

System responses are typed in upper case letters. The user types the answers to the questions as specified after the word 'Type:'.

Step 1. Dial the phone number for the computer
Depress Return Key (Return)

Step 2. Type tso (to enter the time sharing operation)
Return

WELCOME TO NVIP
PLEASE SIGN ON

Step 3. Type: logon_user id/password_size(2500)_a(account number)
Return

'User ID' LOGON IN PROGRESS AT 'CURRENT TIME' 'CURRENT DATE'
*** WELCOME TO N.V.I.P. 033d TIME SHARING OPTION ***
*** USE THE NEWS COMMAND FOR CURRENT INFORMATION ***
**** news was updated as of 'DATE UPDATED' ****
*******************************************************
***** THE DATE IS: 'CURRENT DATE' **************
***** THE TIME IS: 'CURRENT TIME' **************
*******************************************************************************

DO YOU WANT TO INPUT DATA FROM THE DISKETTE
ENTER YES OR NO

Step 4. Type: no
Return

DO YOU WANT A LIST OF THE .OUT. DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC
Step 5. Type: no
Return

DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
Enter 'NO' to proceed to the listing of the document datasets
Enter 'YES' to proceed directly into Editspec

Step 6. Type: yes
Return

NOTE: Type the following Editspec commands to receive
messages for CEGS-04200.

DATE: 'CURRENT DATE'

Step 7. Type: .logon_spec writer user id;spec writer user
account number;password.
Return

Step 8. Type: .noti (cegs04200.00).
Return

Step 9. Type: .logon_user id;account no;password.
Return

*** User logged-off Editspec System
*** User logged-on Editspec System
The present time is 'CURRENT TIME'
The present date is 'CURRENT DATE'

Step 10. Type: .edit (cegs04200.00).
Return

ENTER A DESCRIPTION OF THE WORK TO BE PERFORMED

Step 11. Type: 2.3
Return

TIME: 'CURRENT TIME' DATE: 'CURRENT DATE'
*** System in edit-mode: cycle number: 'CURRENT CYCLE'

Step 12. Type: .pr_16;1,x;void,not1,not2;;1;1;;;;;3.
Return

****.OUT NO16.T171119 WAS ALLOCATED AS THE TERMINAL FILE
THIS DOCUMENT WAS NOT GENERATED FROM ANOTHER DOCUMENT.
*** LOGIC CONDITIONS TABLE IS EMPTY.
COMMAND IGNORED BUT PROCESSING CONTINUES.
THE TERMINAL OUTPUT DATA SET WAS SUCCESSFULLY STORED AND
DEALLOCATED.
Step 13. Type: .logof.

Return

COMMAND ISSUED:
'CURRENT TIME' DATE 'CURRENT DATE'
ELAPSED TIME OF EDIT/STORE SESSION: MINUTES.
*** EXIT EDIT MODE.
*** USER LOGGED-OFF EDITSPEC SYSTEM.
*** END-OF-INPUT ENCOUNTERED.
**********JOB HAS BEEN TERMINATED **********

DO YOU WANT TO LIST ANY OF THE DOCUMENT DATA SETS (YES OR NO)

Step 14. Type: no

Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATA SETS
ENTER NO TO PROCEED WITH LOGOFF

Step 15. Type: no

Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 16. Type: no

Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

Step 17. Type: no

Return

DO YOU WANT A LIST OF THE .OUT. DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 18. Type: yes

Return

THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAM------- XXXX.OUT.NO16.TI71119
IN-CAT------- SYSCTLG.VSHAR01
DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY WITH EDITSPEC

Step 19. Type: yes

Return

DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE
Step 20. Type: 1
Return

WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 21. Type: xxxx.out.no16.t171119
Return

LISTING OF DATA SET STARTS AT: 'CURRENT TIME'

Document will be printed as requested.

THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAM -------- XXXX.OUT.NO16.T171119
IN-CAT ------ SYSCTLG.VSHARRO1

DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY WITH EDITSPEC

Step 22. Type: yes
Return

DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE

Step 23. Type: del
Return

WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 24. Type: xxxx.out.no16.t171119
Return

THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED

THERE ARE NO DATA SETS AVAILABLE TO BE LISTED OR DELETED
SESSION CONTINUING WITH EDITSPEC
DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
ENTER 'NO' TO PROCEED TO THE LISTING OF THE DOCUMENT DATASETS
ENTER 'YES' TO PROCEED DIRECTLY INTO EDITSPEC

Step 25. Type: no
Return

DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS (YES OR NO)

Step 26. Type: no
Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS?
ENTER NO TO PROCEED WITH LOGOFF

5-4
Step 27. Type: no
Return
DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 28. Type: no
Return
DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

Step 29. Type: yes
Return
DO YOU WISH TO LOGON WITH ANOTHER ID?

Step 30. Type: no
Return

TIME='CURRENT TIME' CPU='CPU TIME' SERVICE='SERVICE NUMBER' SESSION='TIME'
DATE='Current Date'

----------------------------------------------------------------------------------------
***** THE CONNECT TIME IS LISTED AS SESSION ON *****
***** THE ABOVE LINE. THE CONNECT TIME CHARGE *****
***** IS 13 CENTS/MINUTE ******
----------------------------------------------------------------------------------------
TOTAL SYSTEM RESOURCES USED FOR THIS SESSION
EXECUTION WAS DURING NORMAL WORKING DAY
THE CPU TIME IN HUNDREDTHS OF SECONDS: 'CPU TIME'
THE EXCP COUNT (10): 'EXCP COUNT'
THE COST ASSOCIATED WITH CPU AND EXCP UTILIZATION IS: 'COST'
'USER ID' LOGGED OFF TSO AT 'CURRENT TIME' ON 'CURRENT DATE'
LAST STEP COMPLETION CODE WAS USER 000
PROCEDURE 6

PREPARE TEXT FOR ENTRY INTO
THE EDITSPEC SYSTEM

1. GENERAL.

Project unique text, prepared by the specification writer must be properly coded for incorporation in the project specification section. The operator must know how to apply the EDITSPEC internal format commands.

2. GUIDANCE.

Chapter 4, Command Methodology of the user manual has the commands listed by activity for ease of learning the commands. Required format codes for the standard print format adopted by the Corps of Engineers are contained in Appendix B. The following examples are provided to aid the user in coding text.

a. An example of coding of page one of a guide specification using commands listed below, is shown in Figure 6.1:

<table>
<thead>
<tr>
<th>Commands</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>s13</em></td>
<td>instructs the system to increment the third subfield of the page numbering format when printing a project specification</td>
</tr>
<tr>
<td><em>bp</em></td>
<td>begin paragraph numbering with 1</td>
</tr>
<tr>
<td><em>hs</em></td>
<td>defines the header storage text and it's location on the printed page</td>
</tr>
<tr>
<td><em>lj</em></td>
<td>left justify</td>
</tr>
<tr>
<td><em>u</em></td>
<td>underscore</td>
</tr>
<tr>
<td><em>ue</em></td>
<td>underscore end</td>
</tr>
<tr>
<td><em>cj</em></td>
<td>center justify</td>
</tr>
<tr>
<td><em>sl</em></td>
<td>skip line</td>
</tr>
<tr>
<td><em>sl4</em></td>
<td>skip 4 blank lines</td>
</tr>
<tr>
<td><em>rj(B)</em> <em>sl</em></td>
<td>right justify (B) and skip line</td>
</tr>
<tr>
<td><em>p2a26</em></td>
<td>standard paragraph identifier for automatic section identifier in a project section</td>
</tr>
<tr>
<td><em>sl1</em> <em>rj(C)</em> <em>np</em> <em>sl</em></td>
<td>skip one line, print note identifier (C) right justified, depress the normal line skipping for the next paragraph, return to the next line</td>
</tr>
</tbody>
</table>
b. Figure 2 is an example of coding required to define the first page to be printed of a project specification section, block text that is to always appear on the same page, to reset paragraph numbering within the text, and how to indicate the end of a line to be stored in EDITSPEC. The following commands were used in the example:

Commands:

*bp 26;9,F*
Reset the *p2a26* for Section 9G, last section was 9F

*bn 26;3;9,G,1*
begin page numbering with 9G-1

*p2a26*
standard paragraph identifier for automatic section number

*cj*
center justify

*tc*
add character string to table of contents

*pl*
first level of defined paragraph format

*p2*
second level of defined paragraph format

*tb 250*
beginning of a table to be formatted as defined in table format 250

*r*
row

$
column separator character

*te*
end of table

*sl*
skip to next line

*fl*
text marked by a flag command to indicate the designer must make a choice

6-2
c. Figure 3 is an example of coding required to define placing a table on a separate page, indicate table headings, and tablenotes, by using the following commands:

Commands:
*sp* skip page
*tb 24011* beginning of table to be formatted as defined by table format 024011
*r* row
$ column separator character
*n* tablenote (to be automatically numbered)
*te* end of table
The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

- American Society for Testing and Materials (ASTM) Publications:
  - C 119-74 — Definitions of Terms Relating to Natural Building Stones.
  - C 615-68A (R 1977) — Structural Granite.
  - C 616-68A (R 1977) — Building Sandstone.
  - C 629-68A (R 1977) — Structural Slate.

- Marble Institute of America (MIA) Publication:
  - Marble Design Manual I-R.

Shop Drawings: Shop drawings shall be submitted for approval in accordance with the SPECIAL PROVISIONS. Shop drawings shall indicate the details of jointing, number and location of anchors, anchorage system, and setting diagrams.

Figure 6.1. Guide Specification, Page 1.
FURRING, METAL, LATHING, AND PLASTERING

APPlicable publications

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

Federal Specifications (Fed. Spec.): Lath, Metal, (and Other Metal Plaster Bases)

American National Standards Institute, Inc. (ANSI) Standard:

American Society for Testing and Materials (ASTM) Publications:

GENERAL: Gypsum plaster with Keene's cement finish as included herein shall be applied as specified hereinafter to those areas indicated in the finish schedule. Ceilings shall include exposed overhead surfaces. Metal framing and furring systems for application of metal plaster base on ceilings, are included. Plaster base coat proportions are given in Table II, and the required types or thickness of lath are in Table I at the end of this section. Ends of wire ties used for lathing and furring shall receive three full twists and be bent into the plane of the lath.

Figure 6.2. Project Specifications Section, Page 1.
Plaster base

Metal plaster base — $ — 5/8 inch, minimum
Gypsum plaster base — $ — 1/2 inch, minimum
3/4 inch, minimum for
furred walls with
3/8-inch lath

Masonry walls — $ — 5/8 inch, minimum
Concrete walls — $ — 5/8 inch, maximum
Concrete ceilings — $ — 1/8 inch, minimum
3/8 inch, maximum

The total plaster thickness from the back plane of the metal plaster base exclusive of ribs shall be not less than 3/4 inch.*

Concrete ceilings requiring plaster more than 3/8-inch thick to produce the required lines and surfaces shall be lathed with ribbed or self-furring metal plaster base.*

Figure 6.3. Coded Table.
PROCEDURE 7
PREPARATION OF A PROJECT SPECIFICATION
BY TEXT EDITING

1. PROJECT SPECIFICATION SECTION.

The specification writer has tailored guide specification CEGS-10801 and made flag choices (Figures 7.1, 7.2 and 7.3) to reflect project unique requirements and is ready for a final copy of the project specification to be prepared.

2. OPERATOR PROCEDURES.

Upon receipt of the final draft of the project specification the operator must perform the following tasks:

a. Identify project. An assigned prefix of four unique characters to identify all sections of specification for this project was assigned, i.e. "mwhs" for a warehouse building at the Mississippi Army Ammunition Plant.

b. Access the System. Prior to entering the EDITSPEC system, the operator must follow the procedure given to enter and leave the computer.

c. Editing. The following system, internal and editing commands were applied to produce the specification section.

.logon 990001021abc;mwhs01. (User id and acct number)

The following commands are to be issued only once per document.

.noti (cegs10801.00). (To receive message of changes to document)

.size 180. Number of lines per document (number lines per page X number pages) or the space command may be used.

.dscr (mwhs01);180. (Create the data set)

.new (99mw10801.00);(mwhs01);1. (Create new document stored on data set 99mw01 without an immediate edit)

.acce (mwhs10801.00);(w); (990001021??? (Grant all users whose ID match the mask write access)

.edit (99mw10801.00). (Edit the document and enter activity description, i.e., creation of spec or reviewing schedules in specification)
Fed. Spec. WW-P-541, Type III, Class 2. Cabinet shall be 16 inches wide, 20 inches high, and 6 inches deep. Mirror shall be plate or float glass. Design of swing door cabinet assembly
*p2* Wood Shelves (WS): Shelves shall be 10 inches wide by 5 feet long and shall be made of 2-inch thick clear white oak. Fasteners, including mounting bolts shall be concealed. Edges on front and ends of shelves shall be rounded to 1/2-inch radius. Shelves and support brackets shall be thoroughly sanded to remove tool marks and finished with three coats of polyurethane varnish.

*cr*

**tb 108014**

**cj ACCESSORIES REQUIRED* s11**

*th* *u* Room *ue* $ *u* CH *ue* $ *u* GB *ue* $ *u* MC *ue* $ *u* MG *ue* $ *u* PTD *ue* $ *u* SNTD *ue* $ *u* SD *ue* $ *u* WS *ue* $ *u* SMLD *ue* $ *u* TTD *ue* $ *u* WR *ue*

**r** 100 $ 3 $ 1 $ 1 $ 2 $ 3 $ 3 $ 3 $ 3 $ 2

**r** 127 $ 3 $ 1 $ 1 $ 2 $ 1 $ 3 $ 3 $ 3 $ 3 $ 2

**r** 139 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1

**r** 145 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1 $ 1

**ce**

**be**

(At this point, the user may elect to list the text for proofing)

*cr* (end input mode)

.stor. (exit edit mode, enter system mode)

.tabl 108014;b3c4,b3c2,b3c2,b3c2,b3c3,b3c4,b3c2,b3c2,b3c3,b3c3,b3c2;11.

.edit (awn10801.00). (table format for table entered)

.bp 26;10.

.bn 26;3;10,A. (begin numbering with 10A)

NOTE: Resolve the external references with reference removal and flag removal switches set to 1 (.rr_;1;1,) before the final printing of the document.

.pr 26;1,x,void,proj;;1;;1. (print without index, page and paragraph initialization, at a users high speed printer)

.logof.
The system will respond with the following questions. (User types answers as noted).

***END-OF-INPUT ENCOUNTERED. **********JOB HAS BEEN TERMINATED**********

DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS (YES OR NO)

Step 1. Type: no
Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS
ENTER NO TO PROCEED WITH LOGOF

Step 2. Type: no
Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 3. Type: no
Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

Step 4. Type: no (Sends you to the out data sets)
Return

DO YOU WANT A LIST OF THE .OUT. DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 5. Type: yes
Return

System will respond with:

THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAM ------- XXXX.OUT.JL23.T105722
IN-CAT ------- SYSCTLG.VSHAR01

DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
Enter 'NO' TO PROCEED DIRECTLY WITH EDITSPEC

Step 6. Type: yes
Return

DO YOU WANT TO LIST OR DELETE THE DATA SET?
Enter L FOR LIST OR DEL FOR DELETE

Step 7. Type: 1
Return

WHICH DATA SET DO YOU WANT TO LIST/DELETE?
Step 8. Type: xxxx.out.j123.t105722
Return

Step 9. Before doing a carriage return, position your paper for correct top margin.

The document will be printed as requested (Figure 7.4). Upon completion of printing the system will respond with the following.

LISTING OF DATA SET ENDS AT: 11:33:47 (current time)
THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAM -------- XXXX.OUT.JL23.T105722
IN-CAT-------- SYSTLG.VSHEAR01

DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY WITH EDITSPEC

Step 10. Type: Yes
Return

DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE

Step 11. Type: del
Return

NOTE: (To keep storage to a minimum, always delete after listing)

WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 12. Type: xxxx.out.j123.t105722
Return

DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
ENTER 'NO' TO PROCEED TO THE LISTING OF THE DOCUMENT DATASETS
ENTER 'YES' TO PROCEED DIRECTLY INTO EDITSPEC

Step 13. Type: no
Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS
ENTER NO TO PROCEED WITH LOGOFF

Step 14. Type: no
Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 15. Type: no
Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

7-5
Step 16. Type: yes
Return
DO YOU WISH TO LOGON WITH ANOTHER ID?

Step 17. Type: no
Return

TIME-"CURRENT TIME' CPU-"CPU TIME' SERVICE-"SERVICE NUMBER' SESSION-"TIME'
DATE-"Current Date'

******************************************************************************************
***** THE CONNECT TIME IS LISTED AS SESSION ON *****
***** THE ABOVE LINE. THE CONNECT TIME CHARGE *****
***** IS 13 CENTS/HOUR *****
******************************************************************************************
TOTAL SYSTEM RESOURCES USED FOR THIS SESSION
EXECUTION WAS DURING NORMAL WORKING DAY
THE CPU TIME IN HUNDREDTHS OF SECONDS: 'CPU TIME'
THE EXCP COUNT (10): 'EXCP COUNT'
THE COST ASSOCIATED WITH CPU AND EXCP UTILIZATION IS: 'COST'
'USER ID' LOGGED OFF TSO AT 'CURRENT TIME' ON 'CURRENT DATE'
LAST STEP COMPLETION CODE WAS USER 000

Session Complete

3. SUMMARY.

The number and type of commands an operator would use in preparing a
project specification section would vary according to the mark-up of the
draft specification. Other features, not shown in the example, may be
utilized (Reference User Manual).
Unless otherwise instructed, select one choice for each of the following flags:

(Choices in lists are indicated by a negative choice number; the last two choices in a multiple choice flag are the punctuation mark and the connecting word.)

<table>
<thead>
<tr>
<th>Single Choice Flag ID</th>
<th>Located On Or Near Line Numbers</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5210</td>
<td>Carbon steel and copper alloy/Carbon steel, copper alloy, and brass/DES metal finishes</td>
</tr>
<tr>
<td>4</td>
<td>7900</td>
<td>Surface mounted vanity/Recessed cabinet/DES sliding door medicine cabinet</td>
</tr>
<tr>
<td>5</td>
<td>8600</td>
<td>Surface /Recessed /DES swing door medicine cabinet</td>
</tr>
<tr>
<td>6</td>
<td>9100</td>
<td>C/D/E/DES glass mirror frame styro, DD-40411</td>
</tr>
<tr>
<td>7</td>
<td>10100</td>
<td>22-gage carbon steel/0.0256-inch, stainless steel/Surface mounted folded paper towel dispenser</td>
</tr>
<tr>
<td>8</td>
<td>10800</td>
<td>Style S/Style T/DES recessed paper towel dispenser cupola</td>
</tr>
</tbody>
</table>

Figure 7.1. Flag Table
<table>
<thead>
<tr>
<th>SINGLE CHOICE FLAG ID</th>
<th>LOCATED ON OR NEAR LINE NUMBERS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>11300</td>
<td>9</td>
</tr>
<tr>
<td>FCH</td>
<td>single /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>dual /</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>robe hook pins</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>12100</td>
<td>10</td>
</tr>
<tr>
<td>FCH</td>
<td>surface/</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>recessed/</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>sanitary napkin and tampon dispenser</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>12500</td>
<td>11</td>
</tr>
<tr>
<td>FCH</td>
<td>22 napkins /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>30 napkins /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>15 napkins or 20 tampons /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>15 napkins and 20 tampons /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>15 napkins and 50 tampons /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>20 napkins and 20 tampons /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>30 napkins and 27 tampons /</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>sanitary napkin and tampon dispenser capacity</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>12600</td>
<td>12</td>
</tr>
<tr>
<td>FCH</td>
<td>complimentary /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>10-cent coin /</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>sanitary napkin and tampon dispenser operation</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13300</td>
<td>13</td>
</tr>
<tr>
<td>FCH</td>
<td>straight /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>bent as required /</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>shower curtain rail</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>17000</td>
<td>14</td>
</tr>
<tr>
<td>FCH</td>
<td>A. stainless steel /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>K, copper alloy /</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>toilet tissue dispenser style, UA-P-341</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>17700</td>
<td>15</td>
</tr>
<tr>
<td>FCH</td>
<td>recessed /</td>
<td></td>
</tr>
<tr>
<td>FCH</td>
<td>surface /</td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>waste receptacle mounting</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>18000</td>
<td>16</td>
</tr>
<tr>
<td>FCH</td>
<td>waste receptacle capacity</td>
<td></td>
</tr>
</tbody>
</table>

END OF FLAG TABLE

Figure 7.1. Flag Table (Cont)
Figure 7.2. Working Copy of Guide Specification Continued.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4520</td>
<td><em>a11</em> <em>a1</em> (E) <em>a9</em> <em>a1</em> /</td>
</tr>
<tr>
<td>4530</td>
<td><em>a1</em> /</td>
</tr>
<tr>
<td>4600</td>
<td>66 <em>a1</em> <em>a1</em> FINISHES : Finishes on metals shall be provided as /</td>
</tr>
<tr>
<td>4700</td>
<td>10 follows : /</td>
</tr>
<tr>
<td>4710</td>
<td>7 <em>a1</em> /</td>
</tr>
<tr>
<td>4900</td>
<td>13 <em>a1</em> 100011* /</td>
</tr>
<tr>
<td>5000</td>
<td>39 <em>a1</em> <em>a1</em> Metal <em>a1</em> <em>a1</em> <em>a1</em> <em>a1</em> Finish <em>a1</em> <em>a1</em> /</td>
</tr>
<tr>
<td>5100</td>
<td>54 <em>a1</em> Stainless steel <em>a1</em> No. 4 general-purpose polished /</td>
</tr>
<tr>
<td>5200</td>
<td>36 <em>a1</em> <em>a1</em> Aluminum <em>a1</em> Satin anodic, clear /</td>
</tr>
<tr>
<td>5210</td>
<td>62 <em>a1</em> <em>a1</em> <em>a1</em> Carbon steel, copper alloy, and brass/<em>a1</em> <em>a1</em> Chromium /</td>
</tr>
<tr>
<td>5220</td>
<td>16 platted, bright /</td>
</tr>
<tr>
<td>5400</td>
<td>6 <em>a1</em> /</td>
</tr>
<tr>
<td>5100</td>
<td>Metal Finish</td>
</tr>
<tr>
<td>5100</td>
<td>Stainless steel No. 4 general-purpose polished</td>
</tr>
<tr>
<td>5110</td>
<td>Aluminum Satin anodic, clear</td>
</tr>
<tr>
<td>5210</td>
<td>(Carbon steel, copper alloy, and brass) Chromium plated, bright</td>
</tr>
<tr>
<td>5210</td>
<td>0</td>
</tr>
</tbody>
</table>

**Figure 7.2. Working Copy of Guide Specification Continued.**
5600  63 *lc 19 p#b ACCESSORY ITEMS * shall conform to the respective / 
5700  37 specifications and other requirements specified below. / 

-22700 
-22800 
-22900 
-23000 
-23100 
-23110 
-23200 
-23300 
-23400 
-23500 
-23600 

E. Paragraphs 5 and 6: In order to minimize 
the confusion of selecting the numerous options 
contained in Fed. Spec. WM-F-541/NA, only those 
accessories and finishes normally suitable for military 
construction were included in this guide specification. 
When other accessories and finishes are required to 
meet the needs of the project, the specifier should 
review the options included in Fed. Spec. WM-F-541/NA 
for inclusion. When preparing the contract documents, 
the specifier should review the detail requirements of 
Fed. Spec. WM-F-541/NA to assure that correct 
selections have been included. In areas of hard usage, 
maximum use should be made of recessed accessories.

-24400 
-24400 
-24400 
-24400 
-24400 
-24400 
-24400 
-24500 
-24700 
-24700 
-24900 
-24900 
-24900 
-24900 
-24900 
-24900 
-24900 
-24900 
-25300 
-25300 
-25300 
-25300 
-25300 
-25300 

CH Books will be located out of the way of 
traffic and at an elevation that will 
minimize the possibility of head injury 
from the hooks. These books will be 
mounted on an ash strip when used in 
rough usage areas.

FTD Private bathrooms used by women. Limit 
to one per bathroom.

GB Bathrooms that will be used by people in 
a weakened condition, such as in 
hospitals. Vertical grab bars should be 
considered in private bathrooms where a 
soap and grab bar combination (SCR or 
SGS) accessory is not provided. Forms 
and lengths will be shown on the 
drawings.

IC Private bathrooms where storage of 
personal items in the bathroom is also 
desirable. Limit to one per bathroom.

Select Class I or Class 2. When a 
vanity cabinet is specified, a glass 
mirror is required.

-25300

Figure 7.2. Working Copy of Guide Specification continued.
| 25600 | Private bathroom where a medicine cabinet is not provided, in general-use toilets, and hand washing areas. Mirror is 18 inches by 30 inches. Mirrors larger than 18 inches by 30 inches will be specified in SECTION: GLASS AND GLAZING. Limit to not more than one per lavatory. Adjustable tilt table mirror will be provided in areas to be used by wheelchair handicapped. |
| 25600 | Areas used by neuropsychiatric patients or prisoners and where vandalism would be a problem in areas used by the public. Limit to one per lavatory. |
| 5000 | Public toilets and toilets in nondomestic type buildings in accordance with the requirements of the using service. Limit to not more than one for two lavatories, except one per toilet in single lavatory installation. |
| 26900 | Bathrooms with bathtub or shower. Limit to two per shower or bathtub. These hooks will be mounted on an oak strip when used in rough usage areas. |
| 26900 | Public toilets and toilets in nondomestic type buildings used by women. Disposal will be mounted in the toilet partition and serving two toilet compartments. Such toilet compartment shall be accessible to a disposal unit. |
| 27600 | Public toilets and toilets in nondomestic type buildings used by women. Use of recessed units will be considered for installations which are required to present an excellent appearance. Limit to one per toilet. |
| 28000 | Installations with combination bathtub and shower or individual shower, except where metal-cabinet shower units which include rails and curtains are used. One per shower-tub installation and one per individual shower installation. |

*Figure 7.2. Working Copy of Guide Specification Continued.*
BD  Public toilets and toilets in
nondomiciliary type buildings unless
included with paper towel dispenser.
Limit to one per lavatory.

SN  Private toilets with lavatory unless
soap dispenser is specified. Limit to
one per private toilet.

SG  Private bathroom where a metal shelf or
a medicine cabinet is not provided.
Limit to one per bathroom.

SMKD Troop facilties and other areas subject
to rough usage. Installation will be
detailed on the drawings.

SMLD Private bathroom where a glass shelf or
medicne cabinet is not provided.

SCB  Installations with bathub or shower.
Limit to one per bathub or shower-tub
installation and one per separate
showerhead.

TB  Private bathroom. Limit to two per
bathroom.

TP  Private bathroom where a shower is
provided in lieu of a bathtub. Limit to
one per bathroom.

TTR  Limit to one per water closet.

THI  Private bathrooms. Limit to one per
lavatory.

MR  Public toilets and toilets in
nondomiciliary type buildings when
requested by the using service. Use of
recessed combination units will be
considered for installations which are
required to present an excellent
appearance. Limit to not more than one
per two paper towel dispensers.

Figure 7.2. Working Copy of Guide Specification Continued.
5800 72 "p2" Coat Hook (CH): Coat hook shall be brass with two hooks, minimum / 
5900 75 projection of upper hook 3-1/2 inches and lower hook 1-3/4 inches with at / 
6000 50 least two holes thru wall flange for fastening. / 

6100 68 PCL 100 tissue dispenser (ttn): Facial tissue dispenser shall / 
6200 67 conform to Fed. Spec. MIL-P-541, Type 1, Class 4, @1@;surface, recessed. mounting, / 
6500 24 stainless steel face. / 
6510 2 1/ 
6600 59 recessed dispenser shall have a capacity of 300 tissues. / 
6610 3 1/ 

6700 69 "p2" Grab Bar (GB): Grab bar shall conform to Fed. Spec. MIL-P-541, / 
6800 69 Type IV, Class 2. Stainless steel tube shall be 1-1/4 inches O.D. / 
6900 74 Grab bar shall be form and length as indicated. Flange shall have screw / 
7000 75 mounting holes concealed on the lip of the flange. Grab bar shall have a / 
7100 78 smooth surface. Installed bars shall be capable of withstanding a 500-pound / 
7200 70 vertical load without becoming loose from the fastenings and without / 
7300 33 obvious permanent deformation. / 
Class 2. Cabinet shall be 16-inches wide, 20-inches 
7400 64 high, and 6-inches deep. / 
7500 69 "p2" Medicine Cabinet (MC): Medicine cabinet shall conform to / 
7600 69 Fed. Spec. MIL-P-541, Type III, Width, heights and depth of cabinet/ 
7700 69 shall be in accordance with the CUMULATIVE Mirror shall be plate or / 
7800 15 glass. / 

7800 74 "p2" Medicine Cabinet, Class 2. Sliding door cabinet assembly should / 
7900 54 be @14@;surface mounted (ttn) (recessed cabinet). / 
8200 79 1th design and lighting arrangement as indicated. Vanity cabinet shall have / 
8000 56 lighted and mirror shall have plate glass frame. / 

8400 74 "p2" Glass Door Cabinet, Class 2. Design of sliding door cabinet assembly / 
8500 78 including the lighting arrangement shall be as indicated. Assembly shall be / 
8600 26 @11@;surface, recessed@9. / 
8800 77 mounted. Cabinet shall be located centrally behind the door. Mirror shall / 
8900 31 be provided on cabinet door. / 

9000 57 "p2" Mirror, Class (MM): Glass mirror shall conform to / 
9100 54 Fed. Spec. MIL-H-411, Class 2, Style @11@, @11@;surface, chrome, / 
9200 40 mounted. Mirror shall be stainless steel or / 
9300 76 chromed covered steel, mirror quality, @11@-inch thickness, chrome. / 

Figure 7.2. Working Copy of Guide Specification Continued.
Figure 7.2. Working Copy of Guide Specification Continued.
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DEPARTMENT OF THE ARMY / OFFICE OF THE CHIEF OF ENGINEERS /

Notice 4
August 1978

CORPS OF ENGINEERS GUIDE SPECIFICATION
MILITARY CONSTRUCTION

SECTION 7.21

(A)

SECTION 0A

(continued)

1. APPLICABLE PUBLICATIONS: The Federal Specifications (Fed. Spec.) listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. / *all*

1400 1500
1500 1600
1600 1700
1700
1800
1900

*sb 250*

2000-5000092-50001040 2100-5001009b-50010112

2200-50041088-50041200

2. GENERAL: Toilet accessories as specified herein shall be provided in accordance with the SCHEDULE herewith. Porcelain type, tile-wall accessories are specified in SECTION: CERAMIC TILE. Each accessory item shall be complete with the necessary mounting plates, anchors, and fasteners. Concealed / mounting plates shall be .1 sturdy construction

Figure 7.3. Working Copy of Guide Specification.
Print Option 2.
Figure 7.3. Working Copy of Guide Specification Continued.
Print Section 2.
### Table 5. Finishes

<table>
<thead>
<tr>
<th>Metal</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless steel</td>
<td>No. 4 general-purpose polished /</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Satin anodic, clear /</td>
</tr>
<tr>
<td>[Carbon steel, copper alloy, and brass]</td>
<td>Chromium / plated, bright /</td>
</tr>
</tbody>
</table>

**E.** Paragraphs 5 and 6: In order to minimize the confusion of selecting / the numerous options contained in Fed. Spec. MIL-P-541/8A, only those / accessories and finishes normally suitable for military construction were / included in this guide / specification. When other accessories and finishes are / required to meet the needs of the project, the specifier should review the / options included in Fed. Spec. MIL-P-541/8A for inclusion. When preparing / the contract documents, the specifier should review the / detail requirements / of Fed. Spec. MIL-P-541/8A to assure that correct selections have been / included. In areas of hard usage, maximum use should be made of recessed / accessories. /

**b.** ACCESSORY ITEMS shall conform to the respective / specifications and other requirements specified below. / /
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTD</td>
<td>Public toilets and toilets in nondomiciliary type buildings / in accordance with the requirements of the using service. Limit to not / more than one for two lavatories, except one per toilet in single lavatory / installation.</td>
</tr>
<tr>
<td>W</td>
<td>Bathrooms with bathtub or shower. Limit to two per shower / or bathtub. These hooks will be mounted on an oak strip when used in rough / usage areas.</td>
</tr>
<tr>
<td>SHTD</td>
<td>Public toilets and toilets in nondomiciliary type buildings / used by women. Installation will be mounted in the toilet partition and / serving two toilet compartments. Such toilet compartment shall be accessible / to a disposal unit.</td>
</tr>
<tr>
<td>SHTD</td>
<td>Public toilets and toilets in nondomiciliary type / buildings used by women. Use of recessed units will be considered for / installations which are required to present an excellent appearance. Limit / to one per toilet.</td>
</tr>
<tr>
<td>SC &amp; SCK</td>
<td>Installations with combination bathtub and shower or / individual shower, except where metal-cabinet shower units which include / rails and curtains are used. One per shower-tub installation and one per / individual shower installation.</td>
</tr>
<tr>
<td>SD</td>
<td>Public toilets and toilets in nondomiciliary type buildings / unless included with paper towel dispenser. Limit to one per lavatory.</td>
</tr>
<tr>
<td>SH</td>
<td>Private toilets with lavatory unless soap dispenser is / specified. Limit to one per private toilet.</td>
</tr>
<tr>
<td>SG</td>
<td>Private bathrooms where a metal shelf or a medicine cabinet / is not provided. Limit to one per bathroom.</td>
</tr>
</tbody>
</table>

Figure 7.3. Working Copy of Guide Specification Continued. Print Option 2.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>29100</td>
<td>Troop facilities and other areas subject to rough usage. / Installation will be detailed on the drawings. /</td>
</tr>
<tr>
<td>29200</td>
<td></td>
</tr>
<tr>
<td>29300</td>
<td>Private bathrooms where a glass shelf or medicine / cabinet is not provided. /</td>
</tr>
<tr>
<td>29400</td>
<td></td>
</tr>
<tr>
<td>29500</td>
<td>Installations with bathtub or shower. Limit to one per / bathtub or shower-tub installation and one per separate showerhead. /</td>
</tr>
<tr>
<td>29600</td>
<td></td>
</tr>
<tr>
<td>29700</td>
<td>Private bathrooms. Limit to two per bathroom. /</td>
</tr>
<tr>
<td>29800</td>
<td>Private bathrooms where a shower is provided in lieu of a bathtub. / Limit to one per bathroom. /</td>
</tr>
<tr>
<td>29900</td>
<td></td>
</tr>
<tr>
<td>30000</td>
<td>Limit to one per water closet. /</td>
</tr>
<tr>
<td>30100</td>
<td>Private bathrooms. Limit to one per lavatory. /</td>
</tr>
<tr>
<td>30200</td>
<td>Public toilets and toilets in nondomestic type buildings / when requested by the using service. Use of recessed combination units / will be considered for installations which are required to present an / excellent appearance. Limit to not more than one per two paper towel / dispensers. /</td>
</tr>
</tbody>
</table>

6.1 Coat Hook (CH): Coat hook shall be brass with two hooks, minimum / projection of upper hook 3-1/2 inches and lower hook 1-3/4 inches with at / least two holes thru wall flange for fastening. /

6.3 Grab Bar (GB): Grab bar shall conform to Fed. Spec. WW-P-541, / Type IV, Class 2. Stainless steel tube shall be 1-1/4 inches O.D. / Grab bar shall be form and length as indicated. Flange shall have screw / mounting holes concealed on the lip of the flange. Grab bar shall have a / smooth surface. Installed bars shall be capable of withstanding a / 500-pound / vertical load without becoming loose from the fastenings and / without / obvious permanent deformation. /
6.4 Medicine Cabinet (HC): Medicine cabinet shall conform to / Fed. Spec. WM-P-541, Type 1, Class 2, in accordance with the following. Mirror shall be plate or / float glass.

Class 2. Cabinet Shall be 16-inches wide, 30-inches high, and 6-inches deep.

6.5 Mirror, Class (HC): Glass mirror shall conform to / Fed. Spec. WM-N-411, Class 2, Style A16; $... .

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6.7 Paper Towel Dispenser (PTD): Paper towel dispenser shall / conform to Fed. Spec. WM-P-541, Type 1, Class 3.

6.7.1 Mounting S, Surface:

6.7.1.1 Style N (Folded Towels): Style N dispenser shall not be less / than #17; 22-gage carbon steel 0.0259-inch, stainless steel.

6.7.2 Mounting R, Recessed:

6.7.2.1 Style P: Style P dispenser shall have towel compartment and / utility shelf behind mirror door with one liquid soap dispenser and shelf. Capacity of dispensers shall be 1000 folded or 700 multi-fold towels.

6.7.2.2 Style

6.7.3 Robe Hook (RH): Robe hook shall be copper or brass casting with a
durable finish.

Figure 7.3. Working Copy of Guide Specification Continued.
Print Option 2.
### Figure 7.3: Working Copy of Guide Specification Continued

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>11300</td>
<td>6.9 Sanitary Napkin and Tampon Dispenser (SND): Sanitary / napkin and tampon dispenser shall conform to Fed. Spec. MN-P-541, / Type 1, Class 5, mounting</td>
</tr>
<tr>
<td>11400</td>
<td>6.9 Sanitary Napkin and Tampon Dispenser (SND): Sanitary / napkin and tampon dispenser shall conform to Fed. Spec. MN-P-541, / Type 1, Class 5, mounting</td>
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<td>11500</td>
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</tr>
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<td>6.10 Sanitary Napkin and Tampon Dispenser (SND): Sanitary / napkin and tampon dispenser shall conform to Fed. Spec. MN-P-541, / Type 1, Class 5, mounting</td>
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<tr>
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<tr>
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<tr>
<td>14300</td>
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</tr>
<tr>
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<tr>
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<td>6.10 Sanitary Napkin and Tampon Dispenser (SND): Sanitary / napkin and tampon dispenser shall conform to Fed. Spec. MN-P-541, / Type 1, Class 5, mounting</td>
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<td>6.10 Sanitary Napkin and Tampon Dispenser (SND): Sanitary / napkin and tampon dispenser shall conform to Fed. Spec. MN-P-541, / Type 1, Class 5, mounting</td>
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<td>15200</td>
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</tr>
</tbody>
</table>
6.17 Shelf, Metal, Light Duty (SHLD): Light duty metal shelf shall conform to Fed. Spec. WW-P-541, Type V. Shelf shall be supported between brackets or on brackets. Width and length shall be in accordance with the SCHEDULE. Shelf and separate supports shall be stainless steel.

6.19 Towel Bar (TB): Towel bar shall conform to Fed. Spec. WW-P-541, Type IV, Class 1, stainless steel, angular in accordance with the SCHEDULE. Bar shall be minimum 3/4-inch diameter.

6.20 Towel Pin (TP): Towel pin shall have concealed fastenings in integral with or permanently fastened to wall flange, approximately 1-inch projection, design consistent with design of other accessory items.

6.21 Toilet Tissue Dispenser (TTD): Toilet tissue dispenser shall conform to Fed. Spec. WW-P-541, Type 1, Class 1, Style A, stainless steel (K, copper alloy).

6.23 Waste Receptacle (WR): Waste receptacle shall conform to Fed. Spec. WW-P-541, Type II, stainless steel, designed for mounting. Reusable liner of the type standard with the receptacle manufacturer shall be provided. Capacity shall be not less than 5 cubic feet.

7. INSTALLATION: Toilet accessories shall be securely fastened to the supporting construction in accordance with the approved substitute. Accessories shall be protected from damage from the time of installation until acceptance.

Figure 7.3. Working Copy of Guide Specification Continued.
Print Option 2.
1. This guide specification is to be used in the preparation of project specifications in accordance with ER 1110-345-720. It will not be made a part of a contract merely by reference; pertinent portions will be copied verbatim into the contract documents.

2. The capital letters in the right hand margin indicate that there is a technical note pertaining to that portion of the guide specification. It is intended that the letters in the margin be deleted before typing the project specifications.

3. Where numbers, symbols, words, phrases, clauses, or sentences in this specification are enclosed in brackets [ ], a choice or modification must be made; delete inapplicable portion(s) carefully. Where blank spaces occur in sentences, insert the appropriate data. Where entire paragraphs are not applicable, they should be deleted completely.

4. The section number will be inserted in the specification heading and prefixed to each page number in project specifications.

5. Paragraph 1: The listed designations for publications are those that were in effect when this guide specification was being prepared. These designations are updated when necessary by Notice, and reference in project specifications need be made later than in the current Notice for this guide specification. To minimize the possibility of error, the letter suffices, amendments, and dates indicating specific issues should be retained in paragraph 1 and omitted elsewhere in the project specifications.

Figure 7.3. Working Copy of Guide Specification Continued.
Print Option 2.
C. Paragraph 3: Project drawings should indicate mounting heights and location.

D. Paragraph 4: Tamperproof fasteners will be specified for accessories which have exposed fasteners in areas used by neuropsychiatric patients or prisoners and where theft or vandalism would be a problem in areas used by the public. Locations where tamperproof fasteners are required will be inserted in the blank space. Although this guide specification places the responsibility with the Contractor for providing, subject to Government approval, fasteners and anchors of the type, size and number required to adequately secure the accessory items, specific requirements for critical or unusual applications will be specified. When this is necessary, the specifications may refer to details on the drawings, or the specifications may be expanded to include the necessary requirements.

E. Paragraphs 5 and 6: In order to minimize the confusion of selecting the numerous options contained in Fed. Spec. WM-P-541/BA, only those accessories and finishes normally suitable for military construction were included in this guide specification. When other accessories and finishes are required to meet the needs of the project, the specifier should review the options included in Fed. Spec. WM-P-541/BA for inclusion. When preparing the contract documents, the specifier should review the detail requirements of Fed. Spec. WM-P-541/BA to assure that correct selections have been included. In areas of hard usage, maximum use should be made of recessed accessories.

F. Paragraph 6: Only those accessory items to be used will be retained. For materials, sizes, etc., in brackets, the applicable wording will be retained, the inapplicable wording deleted, and the brackets removed. Identifying abbreviation in parentheses will be retained for those items to be used and shown on the drawings. The various accessory items will generally be used in the following locations:

Figure 7.3. Working...
<table>
<thead>
<tr>
<th>24400</th>
<th>24500</th>
<th>24600</th>
<th>24700</th>
<th>CH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hooks will be located out of the way of traffic and at an / elevation that will minimize the possibility of head injury from the hooks. These hooks will be mounted on an oak strip when used in rough usage areas. /</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>24800</th>
<th>24900</th>
<th>FTD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Private bathrooms used by women. Limit to one per / bathroom. /</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25000</th>
<th>25100</th>
<th>25200</th>
<th>25300</th>
<th>GB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bathrooms that will be used by people in a weakened condition, / such as in hospitals. Vertical grab bars should be considered in private / bathrooms where a soap and grab bar combination (SGC or SCS) accessory / is not provided. Forms and lengths will be shown on the drawings. /</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25400</th>
<th>25500</th>
<th>25600</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Private bathrooms where storage of personal items in the / bathroom is also desirable. Limit to one per bathroom. Select Class 1 or / Class 2. When a vanity cabinet is specified, a glass mirror is required. /</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25700</th>
<th>25800</th>
<th>25900</th>
<th>26000</th>
<th>26100</th>
<th>26200</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Private bathrooms where a medicine cabinet is not provided, / in general-use toilets, and hand washing areas. Mirror is 18 inches by 30 / inches. Mirrors larger than 18 inches by 30 inches will be specified in / SECTION: GLASS AND GLAZING. Limit to not more than / one per lavatory. Adjustable tilt table mirror will be provided in areas to / be used by wheelchair handicapped. /</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>26300</th>
<th>26400</th>
<th>26500</th>
<th>NM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Areas used by neuropsychiatric patients or prisoners and / where vandalism would be a problem in areas used by the public. Limit to / one per lavatory. /</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>26600</th>
<th>26700</th>
<th>26800</th>
<th>26900</th>
<th>PTD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Public toilets and toilets in nondomiciliary type buildings / in accordance with the requirements of the using service. Limit to not / more than one for two lavatories, except one per toilet in single lavatory / installation. /</td>
</tr>
</tbody>
</table>

Figure 7.3. Working Copy of Guide Specification Continued. Print Option 2.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>.2700</td>
<td>27100</td>
<td>27200</td>
<td>RH</td>
<td>Bathrooms with bathtub or shower. Limit to two per shower / or bathtub. These hooks will be mounted on an oak strip when used in rough / usage areas. /</td>
</tr>
<tr>
<td>27300</td>
<td>27400</td>
<td>27500</td>
<td>27600</td>
<td>SHD</td>
</tr>
<tr>
<td>27700</td>
<td>27800</td>
<td>27900</td>
<td>28000</td>
<td>SHTD</td>
</tr>
<tr>
<td>28100</td>
<td>28200</td>
<td>28300</td>
<td>28400</td>
<td>SC &amp; SCR</td>
</tr>
<tr>
<td>28500</td>
<td>28600</td>
<td>SD</td>
<td>Public toilets and toilets in nondomestic type buildings / unless included with paper towel dispenser. Limit to one per lavatory. /</td>
<td></td>
</tr>
<tr>
<td>28700</td>
<td>28800</td>
<td>SH</td>
<td>Private toilets with lavatory unless soap dispenser is / specified. Limit to one per private toilet. /</td>
<td></td>
</tr>
<tr>
<td>28900</td>
<td>29000</td>
<td>SG</td>
<td>Private bathrooms where a metal shelf or a medicine cabinet / is not provided. Limit to one per bathroom. /</td>
<td></td>
</tr>
<tr>
<td>29100</td>
<td>29200</td>
<td>SMHD</td>
<td>Toilet facilities and other areas subject to rough usage. / Installation will be detailed on the drawings. /</td>
<td></td>
</tr>
<tr>
<td>29300</td>
<td>29400</td>
<td>SHLD</td>
<td>Private bathrooms where a glass shelf or medicine / cabinet is not provided. /</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7.3. Working Copy / Guide Specification Continued.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>29500</td>
<td>29600</td>
</tr>
<tr>
<td>29700</td>
<td>TB</td>
</tr>
<tr>
<td>29800</td>
<td>29900</td>
</tr>
<tr>
<td>30000</td>
<td>TTD</td>
</tr>
<tr>
<td>30100</td>
<td>TTH</td>
</tr>
<tr>
<td>30200</td>
<td>30300</td>
</tr>
<tr>
<td>30700</td>
<td>30800</td>
</tr>
<tr>
<td>30900</td>
<td>31000</td>
</tr>
</tbody>
</table>

Figure 7.3. Working Copy of Guide Specification Continued.
Print Option 2.
<table>
<thead>
<tr>
<th>Room of</th>
<th>NC</th>
<th>PTO</th>
<th>SHLD</th>
<th>SD</th>
<th>SH</th>
<th>TTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>120</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>203</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1-6&quot;x26&quot;</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1-8&quot;x30&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*be*

*ej END*

**END**

Figure 7.3. Working Copy of Guide Specification Continued.
Print Option 2.
SECTION 10A

TOILET ACCESSORIES

1. APPLICABLE PUBLICATIONS: The Federal Specifications (Fed. Spec.) listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

DO-0041lb       Mirrors, Class A-I
6 Am-l

W-A-P-541/6A     Plumbing Fixtures (Accessories, Land Use) (Detail Specification)
6 Am-l

2. GENERAL: Toilet accessories as specified herein shall be provided in accordance with the SCHEDULE hereinafter. Porcelain type, tile-wall accessories are specified in SECTION: CERAMIC TILE. Each accessory item shall be complete with the necessary mounting plates, anchors, and fasteners. Concealed mounting plates shall be of sturdy construction with corrosion resistant surface.

3. SAMPLES AND DESCRIPTIVE DATA: One sample of each accessory proposed for use shall be submitted for approval. Samples shall be accompanied by descriptive data indicating materials of construction, fasteners proposed for use for each type of wall construction, recommended mounting locations, and mounting instructions. Approved samples may be incorporated into the finished work provided they are identified and their locations noted.

4. ANCHORS AND FASTENERS shall be capable of developing a restraining force commensurate with the strength of the accessory to be mounted and shall be well suited for use with the supporting construction. Where exposed fasteners are permitted, they shall have oval heads and finish to match the accessory.

5. FINISHES: Finishes on metals shall be provided as follows:

<table>
<thead>
<tr>
<th>Metal</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless steel</td>
<td>No. 4 general-purpose polished</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Satin anodic, clear</td>
</tr>
<tr>
<td>Carbon steel, copper alloy, and brass</td>
<td>Chromium plated, bright</td>
</tr>
</tbody>
</table>

6. ACCESSORY ITEMS shall conform to the respective specifications and other requirements specified below.

6.1 Coat Hook (CH): Coat hook shall be brass with two hooks, minimum projection of upper hook 3-1/2 inches and lower hook 1-3/4 inches with at least two holes thru wall flange for fastening.

Figure 7.4. Project Specification.
6.2 Grab Bar (GB): Grab bar shall conform to Fed. Spec. W-P-541, Type IV, Class 2. Stainless steel tube shall be 1-1/4 inches O.D. Grab bar shall be form and length as indicated. Flange shall have screw mounting holes concealed on the lip of the flange. Grab bar shall have a smooth surface. Installed bars shall be capable of withstanding a 500-pound vertical load without becoming loose from the fastenings and without obvious permanent deformation.

6.3 Medicine Cabinet (MC): Medicine cabinet shall conform to Fed. Spec. W-P-541, Type III, Class 2. Cabinet shall be 16 inches wide, 20 inches high, and 6 inches deep. Mirror shall be plate or float glass. Design of swing door cabinet assembly including the lighting arrangement shall be as indicated. Assembly shall be recess mounted. Cabinet shall be located centrally behind the door. Mirror shall be provided on cabinet door.

6.4 Mirror, Glass (HG): Glass mirror shall conform to Fed. Spec. DD-tl-411, Class 2, Style C.


6.5.1 Mounting S, Surface:

6.5.1.1 Style N (Folded Towels): Style N dispenser shall not be less than 0.0269-inch, stainless steel.

6.6 Sanitary Napkin and Tampon Dispenser (SNTD): Sanitary napkin and tampon dispenser shall conform to Fed. Spec. W-P-541, Type I, Class 5, mounting surface. Dispenser including door shall be stainless steel and have a capacity of 15 napkins or 20 tampons. Dispensing mechanism shall be for 10-cent coin operation.

6.7 Soap Dispenser (SD): Soap dispenser shall be liquid type consisting of a vertical stainless steel tank with holding capacity of 40 fluid ounces.

6.8 Wood Shelves (WS): Shelves shall be 10-inches wide by 5-feet long and shall be made of 2-inch thick clear white oak. Fasteners, including mounting bolts shall be concealed. Edges on front and ends of shelves shall be rounded to 1/2-inch radius. Shelves and support brackets shall be thoroughly sanded to remove tool marks and finished with three coats of polyurethane varnish.

6.9 Shelf, Metal, Light Duty (SMLD): Light duty metal shelf shall conform to Fed. Spec. W-P-541, Type V. Shelf shall be supported between brackets or on brackets. Width and length shall be in accordance with the SCHEDULE. Shelf and separate supports shall be stainless steel.

6.10 Toilet Tissue Dispenser (TTT): Toilet tissue dispenser shall conform to Fed. Spec. W-P-541, Type I, Class 1, Style A, stainless steel.


Figure 7.4. Project Specification. (Cont)
Reuseable liner of the type standard with the receptacle manufacturer shall be provided. Capacity shall be not less than 2.4 cubic feet.

7. INSTALLATION: Toilet accessories shall be securely fastened to the supporting construction in accordance with the approved submittals. Accessories shall be protected from damage from the time of installation until acceptance.

8. SCHEDULE:

<table>
<thead>
<tr>
<th>Room</th>
<th>CH</th>
<th>CB</th>
<th>NC</th>
<th>MC</th>
<th>PTD</th>
<th>SNTD</th>
<th>SD</th>
<th>US</th>
<th>SMD</th>
<th>TTD</th>
<th>UR</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 7.4. Project Specification. (Cont)
PROCEDURE 8
PREPARATION OF A PROJECT SPECIFICATION
BY AUTOMATIC GENERATION

1. PROJECT SPECIFICATION SECTION.

The specification writer has checked the design conditions applicable to the project (Figure 8.1) and inserted project unique text in the working copy of the guide specification (Figure 8.2).

2. OPERATOR PROCEDURES.

Upon receipt of the final draft of the project specification the operator must perform the following tasks:

   a. Identify project. An assigned prefix of four unique characters to identify the office and all sections of specification for this project was assigned, i.e. "99mw" for a warehouse building at the Mississippi Army Ammunition Plant.

   b. Access the System. Prior to entering the EDITSPEC system, the operator must follow the procedure given to enter and leave the computer.

   c. Automatic Generation. System, internal and editing commands were applied to produce the specification section (Figure 8.3).

3. COMMANDS.

   (If the operator did not issue a .noti command when obtaining a copy of the guide specification the following commands must be issued).

   .logon 990001021abc;99mw01. (Spec writer user id and previously assigned account number)

   .noti (cegsce212.01). (To receive messages to document)

   .logof.

   (Operator is now ready to logon with previously assigned id and account number)

   .logon 99000101aa;99mw01. (Operator user id and account number)

   (The following commands are issued only once per document)

   .size 180. (Number of lines per document - number lines per page x number pages)

   .dscr (99mw01);180. (Create data set)

8-1
.spec (99mwce212.01);a;1,2,3,-4,5,6,7,-8,9,10,-11,12,13,14.
(Add the selected/rejected design conditions to the spec condition table)

gene (99mwce212.01); cegs;99mw01;1;0;1.
(Generate the project section from the master)

acce (99mwce212.01)(w);(990001021???)
(Grant all users whose ids match the mask write access)

(Remaining commands are a typical example of one editing session)

.edit (99mwce212.01).
(Enter activity description, i.e., creation of project spec or reviewing schedules in specification)

.co ;-2100.
(Convert pull to a *cu, copy the pull from the master and immediately print the text)

.it 1002;/talled /;/beneath and on all sides of sumps /.
(Insert project unique text)

.co ;-4100.
(Convert pull to a *cu, copy the pull from the master and immediately print the text)

.ch 3402;/Membrane /;/Except as otherwise specified, membrane /;/1.
(Insert project unique text)

.co ;-4500.
(Convert pull to a *cu, copy the pull from the master and immediately print the text)

.it 3802;/$/Membrane for the Communications Building shall be fabric, applied in solid mopings, of the type of bitumen with which the fabric is saturated. /.
(Insert project unique text)

.bp 26;7.
(Reset paragraph numbering format 26 to 7A)

.bn 26;3;7,A.
(Reset page numbering format 26 to page 7A-1)

NOTE: Resolve the external references with reference removal and flag removal switches set to 1 (.rr_;1;1.) before the final printing of the document.
.pr 26;1,x;void,proj;,...1. (Out data set is created for printing at users high speed printer)

.stor. (Editing work stored, enter system mode)

.logof. (User logged-off Editspec System)

The system will respond with the following questions. (User types answers as noted).

***END-OF-INPUT ENCOUNTERED. *******JOB HAS BEEN TERMINATED********

DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS (YES OR NO)
Step 1. Type: no
Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS ENTER NO TO PROCEED WITH LOGOF

Step 2. Type: no
Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 3. Type: no
Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

Step 4. Type: no (Loops to the out data sets)
Return

DO YOU WANT A LIST OF THE .OUT. DATA SETS? ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 5. Type: yes (Lists the name of each out data set, to be listed or deleted). Return

System will respond with:

THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAM ------- XXXX.OUT.JL23.T105722
IN-CAT ------- SYSCTLG.VSHAR01

DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS? ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 6. Type: yes
Return
DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE

Step 7. Type: 1
Return

WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 8. Type: xxxx.out.j123.t105722
Return

Step 9. Before doing a carriage return, position your paper for correct top margin.

The document will be printed as requested (Figure 8.3). Upon completion of printing the system will respond with the following.

LISTING OF DATA SET ENDS AT: 'CURRENT TIME'
THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAH --------- XXXX.OUT.JL23.T105722
IN-CAT---------- SYSCTLG.VSHAR01

DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 10. Type: Yes
Return

DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE

Step 11. Type: del
Return

NOTE: To keep storage to a minimum, always delete after listing)

WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 12. Type: xxxx.out.j123.t105722
Return

DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
ENTER 'NO' TO PROCEED TO THE LISTING OF THE DOCUMENT DATASETS
ENTER 'YES' TO PROCEED DIRECTLY INTO EDITSPEC

Step 13. Type: no
Return

DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS (YES OR NO)

Step 14. Type: no
Return

8-4
DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS
ENTER NO TO PROCEED WITH LOGOFF

Step 15. Type: no
Return

DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 16. Type: no
Return

DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

Step 17. Type: yes
Return

DO YOU WISH TO LOGON WITH ANOTHER ID?

Step 18. Type: no
Return

The system will respond with time, CPU, service-session and current date.

TIME-'CURRENT TIME' CPU-'CPU TIME' SERVICE-'SERVICE NUMBER' SESSION-'TIME'
DATE-'Current Date'

*******************************************************************************
****** THE CONNECT TIME IS LISTED AS SESSION ON ******
****** THE ABOVE LINE. THE CONNECT TIME CHARGE ******
****** IS 13 CENTS/MINUTE ******
*******************************************************************************

TOTAL SYSTEM RESOURCES USED FOR THIS SESSION
EXECUTION WAS DURING NORMAL WORKING DAY
THE CPU TIME IN HUNDREDTHS OF SECONDS: 'CPU TIME'
The EXCP COUNT (10): 'EXCP COUNT'
The cost associated with CPU and EXCP utilization is: 'COST'
'USER ID' LOGGED OFF TSO AT 'CURRENT TIME' ON 'CURRENT DATE'
LAST STEP COMPLETION CODE WAS USER 000

Session Complete

4. SUMMARY.

The number and type of commands an operator would use in preparing a
project specification section would vary according to the mark-up of the
draft specification. Other features, not shown in the example, may be
utilized (Reference User Manual).
<table>
<thead>
<tr>
<th>Condition Number</th>
<th>DESIGN CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control Condition (No Action Required)</td>
</tr>
<tr>
<td></td>
<td>Waterproofed Surface:</td>
</tr>
<tr>
<td>2</td>
<td>x. Floor</td>
</tr>
<tr>
<td></td>
<td>3 x. Wall</td>
</tr>
<tr>
<td>4</td>
<td>Membrane Type:</td>
</tr>
<tr>
<td>5</td>
<td>x. Felt</td>
</tr>
<tr>
<td>6</td>
<td>x. Fabric</td>
</tr>
<tr>
<td></td>
<td>x. Protected with Insulation Board</td>
</tr>
<tr>
<td></td>
<td>x. Exposure Temperature of Completed Membrane:</td>
</tr>
<tr>
<td>7</td>
<td>x. 125 Degrees F. and Less</td>
</tr>
<tr>
<td>8</td>
<td>x. Greater than 125 Degrees F.</td>
</tr>
<tr>
<td></td>
<td>Membrane Penetrations:</td>
</tr>
<tr>
<td>9</td>
<td>x. Pipe</td>
</tr>
<tr>
<td>10</td>
<td>x. Conduit</td>
</tr>
</tbody>
</table>

**Figure 8.1. Design Condition Checklist (Marked for Project)**
<table>
<thead>
<tr>
<th>Condition Number</th>
<th>DESIGN CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Floor Drain</td>
</tr>
<tr>
<td>12</td>
<td>Reglets</td>
</tr>
<tr>
<td>13</td>
<td>Wood Nails</td>
</tr>
<tr>
<td>14</td>
<td>Clamping Device</td>
</tr>
</tbody>
</table>

THE END

Figure 8.1. Design Condition Checklist (Cont)
**Corps of Engineers Guide Specification**

**Military Construction**

**Bituminous Waterproofing**

1. Applicable Publications: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

<table>
<thead>
<tr>
<th>Basic Designation</th>
<th>Description</th>
</tr>
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*All* circuits are to be installed beneath and on all sides of sumps.

2. **GENERAL:** Waterproofing shall be installed where indicated. Waterproofing *fl: may be either asphalt or coal-tar.*

3. **GENERAL:** Materials shall be stored in an enclosed area free from contact with soil, weather, and an area maintained at not less than 50 degrees F. for at least 24 hours before use. When waterproofing in an enclosed space, adequate ventilation shall be provided. Where pipes, conduit, or other items pass through the areas to be waterproofed, and where floor drains occur in such areas, the flashing shall be installed after the flashing.

*All* circuits are to be installed beneath and on all sides of sumps.

Figure 8.2. Print Option 3 (Cont)
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| 3. MATERIALS shall conform to the respective specifications and other / requirements specified below. Materials shall be delivered to the site in / sealed containers bearing the manufacturer's original labels. /  
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3.1 Asphalt: ASTM D 449, Type  
3.2 Asphalt Saturated Felt: ASTM D 226, type I.  
3.3 Coal-Tar Pitch: ASTM D 450, Type B.  
3.4 Coal-Tar Saturated Felt: ASTM D 227, 36-inch width.  
3.5 Fabric: ASTM D 173, ASTM D 1327 or ASTM D 1660.  
3.6 Plastic Cement: Fed. Spec. SS-C-153, / Type I / for asphalt, / Type II / for coal-tar pitch /  
3.8 Insulation Board: ASTM C 208, Class C, 1/2-inch thick, asphalt / saturated or coated; Fed. Spec. NM-1-526, 7/16-inch thick, covered one / side with an asphalt surfacing weighing not less than 4 ounces per / square foot and faced with asphalt-saturated kraft paper; or prefabricated / membrane board 1/8-inch thick, consisting of asphalt-saturated felt / laminated under pressure to both sides of mineral filled asphalt core.  
4. APPLICATION: /  
4.1 Inspection: Surfaces to be waterproofed shall be examined carefully / for defects or conditions that will prevent a satisfactory application. / Waterproofing work shall not start until corrections have been made. / Particular attention shall be given to the following: /  
4.1.1 Surfaces shall be free of holes, joints, cracks and projections / which could puncture the membrane. Holes, joints and cracks shall be / pointed flush with mortar and projections shall be cut off or ground / smooth. /  
4.1.2 Sleeves, metal flashings, /
4.1.3 Surfaces to be waterproofed shall be smooth and swept thoroughly / to remove dust, foreign matter and loose materials immediately before / waterproofing is applied. Surfaces shall be thoroughly dry at time / waterproofing is applied. All surfaces shall be inspected and approved / before application of waterproofing.

4.2 Priming: Surfaces to be waterproofed shall be coated uniformly / with primer at the rate of not less than 1 gallon per 100 square feet of / surface. Primer shall be permitted to dry before bitumen is applied. / *a11*

Except as otherwise specified *rj (F)*

4.3 Membrane: Membrane shall be formed of / either / asphalt-saturated felt / or coal-tar pitch / [felt] applied in solid moppings of hot asphalt / or / coal-tar pitch / (felt) applied in solid moppings of hot coal-tar pitch / *f6998.4*

The number of plies and extent of membrane shall be as indicated. / *a11*

Membrane for the Communications Building shall be fabric, applied in solid / moppings, of the type of bitumen with which the fabric is saturated, / *f6998.4*

4.4 Application of Membrane: Asphalt shall not be heated above 450 / degrees F., nor coal-tar above 375 degrees F. Thermometers shall be / used to check the / temperatures at the kettle during the heating process / to insure maximum / temperature is not exceeded. Bitumen shall be applied / uniformly at the / rate for each ply of not less than / 25 pounds per 100 / square feet / for asphalt and 30 pounds per 100 square feet for coal-tar / pitch / *f6998.4*

*Felt or fabric* / *f6998.4* [Felt or fabric] shall be rolled or pressed firmly into the hot bitumen to / eliminate air pockets, / wrinkles or similar deficiencies. Piles shall be / applied shingled fashion / and the

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4.5 Fabric Reinforcing: Reinforcing consisting of two plies of fabric and moppings of bitumen shall be provided over the membrane at corners, angles, or where the membrane passes through a wall, over construction joints, and points where the membrane may be subject to unusual stress. Where slabs or abut walls, the first ply of reinforcing shall extend at least 6 inches on the slab and 8 inches on the wall. At vertical corners, the first ply shall extend at least 5 inches to each side of the corner. The second ply shall lap the first ply by at least 2 inches.

4.6 Clamping Devices:
- At floor drains and elsewhere as indicated, / membrane shall be extended into a clamping device, set in a heavy coating / of plastic cement, and clamped securely.

4.7 Flashings: Flashing of flashing around penetrations and projections shall be coated with primer and permitted to dry. Flashing shall be stripped in with two fabric collars extending 6 and 6 inches, / respectively, beyond the flanges and set in plastic cement. Flashing thus installed shall be lapped and mopped into the plies of the waterproofing / to assure a waterproof joint.

4.8 Flood Test: Prior to concealment, waterproofing on floors / over finished spaces shall be tested for watertightness. Drainage shall be / plugged and floors shall be flooded with 3 inches of water. Water / shall be permitted to stand for 24 hours. If water level changes, leaks / shall be located and repaired, and membrane shall be retested.

5. PROTECTION: Waterproofing against which backfill is to be placed / shall be protected by a single thickness of insulation board. The / insulation board shall be pressed into the final mopping while the mopping / is still hot, with edges of boards brought into moderate contact and / joints staggered. Where surfaced mineral-wood board is used, the surfaced / side shall face outward. Boards shall be carefully and neatly fitted / around pipes and projections and shall cover the entire surface of the / waterproofing. Membranes not covered with insulating fiberboards shall / be given temporary protection to prevent injury to the membrane due to / subsequent building operations.

Figure 8.2. Print Option 3 (Cont)
1. This guide specification is to be used in the preparation of project specifications in accordance with ER 1110-345-720. It will not be made a part of a contract merely by reference; pertinent portions will be copied verbatim into the contract documents.

2. The capital letters in the right hand margin indicate that there is a technical note pertaining to that portion of the guide specification. It is intended that the letters in the margins be deleted before typing the project specifications.

3. Where numbers, symbols, words, phrases, clauses, or sentences in this specification are enclosed in brackets [ ], a choice or modification must be made; delete inapplicable portion(s) carefully. Where blank spaces occur in sentences, insert the appropriate data. Where entire paragraphs are not applicable, they should be deleted completely.

4. The project specification should contain the following requirements:

1. For the CONCRETE & MASONRY sections, surfaces to receive waterproofing will be moist-cured and smooth. Holes will be filled with mortar and high spots and projections will be ground smooth. Installation of sleeves for pipes, conduits, and similar penetrations /
through waterproofed walls and slabs should be specified. Pipes / sleeves, caulking, and insulation should conform to the requirements / of the applicable plumbing, heating, and electrical sections of the / project specifications and should be detailed on the project / drawings. Pipes carrying steam or / hot water should extend a minimum / of 2 inches above the finished floor. Pipes carrying steam or / hot water should be insulated where they penetrate a membrane. / 

(2) For the CARPENTRY section, the project specification should / require water-born, preservative-treated wood nailing for attachment / of membrane on vertical surfaces. / 

B. The section number will be inserted in the specification heading and / prefixed to each page number in project specifications. / 

C. Paragraph 1: The listed designations for publications are those / that were in effect when this guide specification was being prepared. / These designations are updated when necessary by Notice, and references / in project specifications need be no later than in the current / Notice for this guide specification. To minimize the possibility of error, / the letter suffixes, amendments, and dates indicating specific issues / should be retained in paragraph 1 and / included elsewhere in the project / specifications. / 

D. Paragraph 2: The location and extent of waterproofing, the number / of plies, provisions for nailing, large scale details of flashing / around drains and penetrations, height of waterproofing on walls and / details of waterproofing terminations will be shown on project drawings. / Shower pans are covered in SECTION: PLUMBING, GENERAL PURPOSE. / 

E. Paragraph 3: Where waterproofing would be exposed to temperatures of / more than 125 degrees F. after application, paragraph 3.1 will be modified to / specify Type III asphalt in lieu of Type II asphalt, paragraphs 3.3 and / 3.4 covering coal-tar pitch will be deleted, and all references to / coal-tar pitch. / 

F. Bentonite waterproofing may be considered as an option in areas / where sufficient experience has been
developed to assure satisfactory performance. When using bentonite waterproofing system the specification will require the Contractor to submit for approval / evidence that the properties of the bentonite will be equal to that of 5 ply bituminous waterproofing. Bentonite materials will conform to manufacturers' printed specifications and will be installed in accordance with manufacturers' printed instructions. Bentonite will not be specified where hydrostatic head exceeds 12 feet. Where bentonite waterproofing is used, a report will be submitted to HQDA (DARN-HE-9) Washington DC 20314.

Paragraph 4.3: In cases where waterproofing must be applied to concrete or masonry walls in waterlogged soils or where some / settlement is likely to occur, it may be advisable to use the fabric type instead of the felt type. In cases where rough masonry walls must be waterproofed, unless such walls can be made reasonably smooth with a perging of cement mortar, only the fabric type of membrane waterproofing will be specified. Waterproofing will be provided for portions of buildings below the anticipated water table.

Paragraph 4.4: Usable spaces on or below grade will be five ply; floors above grade will be three ply.

*All*

/ *cj END* **END** /
### SECTION 7A

**BITUMINOUS WATERPROOFING**

1. **APPLICABLE PUBLICATIONS**: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

   1.1 **Federal Specifications (Fed. Spec.):**

   - M.I-526C  Insulation Board, Thermal (Mineral Fiber)
   - SS-C-153C  Cement, Bituminous, Plastic

1.2 **American Society for Testing and Materials (ASTM) Publications:**

   - C 208-72  Insulating Board (Cellulosic Fiber), Structural and Decorative
   - D 41-78  Asphalt Primer Used in Roofing, Waterproofing, and Damproofing
   - D 43-73  Creosote Primer used in Roofing, Waterproofing, and Damproofing
   - D 173-80  Bitumen-Saturated Cotton Fabrics Used in Roofing and Waterproofing
   - D 449-79  Asphalt Used in Damproofing and Waterproofing
   - D 450-78  Coal-Tar Bitumen Used in Roofing, Waterproofing, and Damproofing
   - D 1327-78  Bitumen-Saturated Woven Burlap Fabrics used in Roofing and Waterproofing
   - D 1668-80  Glass Fabrics (Woven and Treated) Roofing and Waterproofing

2. **GENERAL**: Waterproofing shall be installed beneath and on all sides of masonry where indicated. Waterproofing may be either asphalt or coal tar and shall be applied when the ambient temperature is 40 degrees F. or above. Materials shall be stored in an enclosed area free from contact with soil, weather, and an area maintained at not less than 50 degrees F. for at least 24 hours before use. When waterproofing in an enclosed space, adequate ventilation shall be provided. Where pipes, conduits, or other items pass through the areas to be waterproofed, the waterproofing shall be installed after the flashing.

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*Figure 8.3. Completed Project Specification*
3. MATERIALS shall conform to the respective specifications and other requirements specified below. Materials shall be delivered to the site in sealed containers bearing the manufacturer's original labels.

3.1 Asphalt: ASTM D 449, Type II.

3.2 Coal-Tar Pitch: ASTM D 450, Type B.

3.3 Fabric: ASTM D 173, ASTM D 1327 or ASTM D 1664.


3.5 Primer: For asphalt - ASTM D 41; for coal-tar pitch - ASTM D 43.

3.6 Insulation Board: ASTM C 208, Class C, 1/2-inch thick, asphalt saturated or coated; Fed. Spec. MNL-1-526, 7/16-inch thick, covered one side with an asphalt surfacing weighing not less than 4 ounces per square foot and faced with asphalt-saturated kraft paper; or prefabricated membrane board 1/8-inch thick, consisting of asphalt-saturated felt laminated under pressure to both sides of mineral filled asphalt core.

4. APPLICATION:

4.1 Inspection: Surfaces to be waterproofed shall be examined carefully for defects or conditions that will prevent a satisfactory application. Waterproofing work shall not start until corrections have been made. Particular attention shall be given to the following:

4.1.1 Surfaces shall be free of holes, joints, cracks and projections which could puncture the membrane. Holes, joints and cracks shall be pointed flush with mortar and projections shall be cut off or ground smooth.

4.1.2 Sleeves, metal flashings, and wood nailing shall be properly installed.

4.1.3 Surfaces to be waterproofed shall be smooth and swept thoroughly to remove dust, foreign matter and loose materials immediately before waterproofing is applied. Surfaces shall be thoroughly dry at time waterproofing is applied. All surfaces shall be inspected and approved before application of waterproofing.

4.2 Priming: Surfaces to be waterproofed shall be coated uniformly with primer at the rate of not less than 1 gallon per 100 square feet of surface. Primer shall be permitted to dry before bitumen is applied.

4.3 Membrane: Except as otherwise specified, membrane shall be formed of either asphalt-saturated fabric applied in solid moppings of hot asphalt or coal-tar pitch saturating fabric applied in solid moppings of hot coal-tar pitch. Membrane for the Communications Building shall be fabric, applied in solid moppings, of the type of bitumen with which the fabric is saturated. The number of pieces and extent of membrane shall be as

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**Figure 8.3. Completed Project Specification (Cont)**
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4.4 Application of Membrane: Asphalt shall not be heated above 450 degrees F., nor coal-tar above 375 degrees F. Thermometers shall be used to check the temperatures at the kettle during the heating process to insure maximum temperature is not exceeded. Bitumen shall be applied uniformly at the rate for each ply of not less than 25 pounds per 100 square feet for asphalt and 30 pounds per 100 square feet for coal-tar pitch. Fabric shall be rolled or pressed firmly into the hot bitumen to eliminate air pockets, wrinkles or similar deficiencies. Pliers shall be applied single fashion and the fabric shall be coated thoroughly. The entire top surface shall then be given a final rolling using not less than 70 pounds of pitch, or 60 pounds of asphalt for each 100 square feet of surface.

4.5 Fabric Reinforcing: Reinforcing consisting of two plies of fabric and mappings of bitumen shall be provided over the membrane at corners, angles, over construction joints, and points where the membrane may be subject to unusual stress. Where slabs abut walls, the first ply of reinforcing shall extend at least 6 inches on the slab and 8 inches on the wall. At vertical corners, the first ply shall extend at least 5 inches to each side of the corner. The second ply shall lap the first ply by at least 2 inches.

4.6 Clamping Devices: Where indicated, membrane shall be extended into a clamping device, set in a heavy coating of plastic cement, and clamped securely.

4.7 Flashing: Flanges of flashing around penetrations and projections shall be coated with primer and permitted to dry. Flanges shall be stripped in with two fabric collars extending 4 and 6 inches, respectively, beyond the flanges and set in plastic cement. Flashing thus installed shall be lapped and mopped into the plies of the waterproofing to assure a waterproof joint.

5. PROTECTION: Waterproofing against which backfill is to be placed shall be protected by a single thickness of insulation board. The insulation board shall be pressed into the final rolling while the mopping is still hot, with edges of boards brought into moderate contact and joints staggered. Where surfaced mineral-wood board is used, the surfaced side shall face outward. Boards shall be carefully and neatly fitted around pipes and projections and shall cover the entire surface of the waterproofing. Membranes not covered with insulating fiberboards shall be given temporary protection to prevent injury to the membrane due to subsequent building operations.

Figure 8.3. Completed Project Specification (Cont)
PROCEDURE 9

PRINTING IN THE EDITSPEC SYSTEM AND LISTING THE DATA SETS

1. GENERAL DESCRIPTION.

This procedure will show the user the three locations a print command may be directed and how to retrieve these formatted copies.

2. PROCEDURES.

System responses are typed in upper case letters. The user types the answers to the questions as specified after the word 'Type':

Step 1. Dial the phone number for the computer. Depress Return Key (Return).

Step 2. Type: tso (to enter the time sharing operation) Return

WELCOME TO NVIP PLEASE SIGN ON

Step 3. Type: logon_user id/password_size(2500)_a(account number) Return

'USER ID' LOGON IN PROGRESS AT 'CURRENT TIME' ON 'CURRENT DATE'
*** WELCOME TO N.V.I.P. 033d TIME SHARING OPTION ***
*** USE THE NEWS COMMAND FOR CURRENT INFORMATION ***
**** news was updated as of 'DATE UPDATED' ********
*******************************************************
***** THE DATE IS: 'CURRENT DATE' ************
***** THE TIME IS: 'CURRENT TIME' ************
*******************************************************
DO YOU WANT TO INPUT DATA FROM THE DISKETTE
ENTER YES OR NO

Step 4. Type: no Return

DO YOU WANT A LIST OF THE .OUT. DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 5. Type: no Return

DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
ENTER 'NO' TO PROCEED TO THE LISTING OF THE DOCUMENT DATASETS
ENTER 'YES' TO PROCEED DIRECTLY INTO EDITSPEC
no - to proceed to the listing of the document data sets
yes - to proceed directly into EDITSPEC

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Step 6. Type: yes
Return

Step 7. Commands issued in EDITSPEC
(Print commands are annotated (a,b,c) for follow-through purposes.)

.logon_user id;account number;
password
>Edit (cegs04200.00).

. logon (Logon to EDITSPEC)
Edited (Edit the document)

a. .pr_16;1,x;area. (Document printed to user's high speed printer creates an .out. data set)

b. .pr_16;1,x;area;;;;1. (Document printed to user's current device after the user logs out of the system)

c. .pr_16;1,x;area;;;;2. (Document printed to user's current device during execution)

Print command c will alert the system to immediately print the document while user is in EDITSPEC.

.logof. (Logoff EDITSPEC)

*** USER LOGGED-OFF EDITSPEC SYSTEM.
*** END-OF-INPUT ENCOUNTERED.
DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS (YES OR NO)

Step 8. Type no
Return

DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS
ENTER NO TO PROCEED WITH LOGOFF

Step 9. Type: yes (to list the print to user's current device from print command b)

DO YOU WANT TO LIST THE FIRST PRINT DATA SET
ENTER 'YES' OR 'NO'

Step 10. Type: no
Return

DO YOU WANT A PERMANENT COPY OF THIS PRINT DATA SET (YES OR NO)

Step 11. Type: no
Return

DO YOU WISH TO LIST THE SECOND PRINT DATASET
ENTER 'YES' OR 'NO'
Step 12. Type: yes
Return
THE SECOND PRINT DATASET(PT08F001) CONTAINS THE FOLLOWING:
POSITION PAPER THEN HIT CARRIAGE RETURN

Step 13. Go to the perforation of the paper, roll the paper up 2 blank
lines, return.

LISTING OF DATA SET STARTS AT: 'CURRENT TIME'

Document printed from print command b

LISTING OF DATA SET ENDS AT: 'CURRENT TIME'
DO YOU WANT A PERMANENT COPY OF THIS PRINT DATA SET (YES OR NO)

yes - permanent data set is required
no - permanent data set is not required

Step 14. Type: no
Return
DO YOU WISH TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 15. Type: no
Return
DO YOU WISH TO TERMINATE THIS SESSION? (YES OR NO)
IF 'NO' WILL RETURN TO EDITSPEC

yes - proceed with logoff
no - loops to the .out. data set area

Step 16. Type: no (to list the print to user's high speed printer
from print command a)
Return
DO YOU WANT A LIST OF THE .OUT. DATA SETS?
Enter 'NO' TO PROCEED DIRECTLY TO EDITSPEC

Step 17. Type: yes
Return

THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAM ------ XXXX.OUT.JL23.T105722
IN-OUT ------ SYSCTLG.VSHAR01

DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
Enter 'NO' TO PROCEED DIRECTLY TO EDITSPEC
Step 18. Type: yes
Return
DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE

Step 19. Type: 1
Return
WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 20. Type: XXXX.OUT.j123.t105722
Return
LISTING OF DATASET STARTS AT: 'CURRENT TIME'
Document printed from print command a.
LISTING OF DATASET ENDS AT: 'CURRENT TIME'
THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
NONVSAAM ------- XXXX.OUT.JL.23.T105722
IN-CAT ------ SYSCTLG.VSHAR01
DO YOU WISH TO REVIEW OR DELETE ANY OF THESE DATA SETS?
ENTER 'NO' TO PROCEED DIRECTLY WITH EDITSPEC

Step 21. Type: yes
Return
DO YOU WANT TO LIST OR DELETE THE DATA SET?
ENTER L FOR LIST OR DEL FOR DELETE

Step 22. Type: del
Return
WHICH DATA SET DO YOU WANT TO LIST/DELETE?

Step 23. Type: XXXX.out.j123.t105722
Return
THE FOLLOWING DATA SETS ARE AVAILABLE TO BE LISTED OR DELETED
THERE ARE NO DATA SETS AVAILABLE TO BE LISTED OR DELETED
SESSION CONTINUING WITH EDITSPEC
DO YOU WANT TO GET INTO THE EDITSPEC SYSTEM?
Enter 'NO' TO PROCEED TO THE LISTING OF THE DOCUMENT DATASETS
Enter 'YES' TO PROCEED DIRECTLY INTO EDITSPEC

Step 24. Type: no
Return
DO YOU WANT TO LIST ANY OF THE DOCUMENT DATASETS (YES OR NO)
Step 25. Type: no
   Return
   DO YOU WANT TO LIST EITHER OF THE PRINT DATASETS
   ENTER NO TO PROCEED WITH LOGOFF

Step 26. Type: no
   Return
   DO YOU WANT TO CONTINUE WITH EDITSPEC? (YES OR NO)

Step 27. Type: no
   Return
   DO YOU WANT TO TERMINATE THIS SESSION? (YES OR NO)
   IF 'NO' WILL RETURN TO EDITSPEC

Step 28. Type: yes
   Return
   DO YOU WISH TO LOGON WITH ANOTHER ID?

Step 29. Type: no
   Return

TIME-'CURRENT TIME' CPU-'CPU TIME' SERVICE-'SERVICE NUMBER' SESSION-'TIME'
DATE-'Current Date'

***** THE CONNECT TIME IS LISTED AS SESSION ON *****
***** THE ABOVE LINE. THE CONNECT TIME CHARGE *****
***** IS 13 CENTS/MINUTE *****

TOTAL SYSTEM RESOURCES USED FOR THIS SESSION
EXECUTION WAS DURING NORMAL WORKING DAY
THE CPU TIME IN HUNDREDS OF SECONDS: 'CPU TIME'
THE EXCP COUNT (10): 'EXCP COUNT'
THE COST ASSOCIATED WITH CPU AND EXCP UTILIZATION IS: 'COST'
'USER ID' LOGGED OFF TSO AT 'CURRENT TIME' ON 'CURRENT DATE'
LAST STEP COMPLETION CODE WAS USER 000
PROCEDURE 10
PROCEDURE FOR PREPARATION OF NOTICES

1. GENERAL DESCRIPTION.

The Corps of Engineers retains the current guide, as well as the previous edition in the guide specification data base. The first four characters of the document name reflect the guide posted through the preceding notice, if applicable. For illustrative purposes assume that the first notice changes have been received for guide CEGS-09650. The copy to be saved will be the basic document; therefore, the four-character prefix will be n000 (n00009650.00). When the second set of changes has been proposed, the n00009650.00 document will be deleted. A new document called n00109650.00 will be created to store the basic document posted through notice 1. Subsequent notice changes would be incorporated into the basic document in the same manner.

2. PROCEDURES.

Since this is the first notice to the guide, the .list dire and .spac commands will be applied to obtain the name and current size of the guide data set. The system will respond with the current size of the primary and secondary data sets. Multiply the primary size given by 2 (assume 170) and apply the default backup size (30) as given in the .dscr command. The last 5-characters of the notice data set name should match the last 5 characters of the guide data set name. If the first character of the guide data set name is "0", the first character of the notice data set name should be "g". If the first character of the guide data set name is "I", the first character of the notice data set name should be "h". This same data set will be repeatedly used for all future notices to this guide.

a. Specification Changes. A new document will be created to contain the notice changes. The four character prefix of the document will be "work" (work09650.00). To post changes that have been made in this document to the guide, the backup option switch in the .new command must be set to 2. The .du command will then be used to create all major tables from the cegs document. The .nn command will be entered to designate the lines changed by the notice.

b. Notice Cover Page. A new document must be created to contain the unique text of the cover page. The first letter of the document name will always be a "u". The second through fourth characters will be the notice number (001). All other characters remain unchanged. The first line of this document will always contain the definition of the notice header. This header will be right justified. The operator will enter the notice cover text for this issue (Figure 10.1).

c. Production Instructions. A new document will be created to contain all production instructions to the EDITSPEC system. The document name will be the same as above except the "u" will be changed to an "i" as the first character. The operator will issue the input command and add all printing instructions. The first edit, print and store will print the notice cover page. Apply one set of .bp, .bn, and .pr commands for each sequential specification change required.
d. Execution Instructions.

(1) **Message.** An update message must be issued at least 5 working days before the notice goes into effect. Before issuing the .udme command, create the current guide as the guide posted through the last notice (i.e., n000). Apply the .du command and resolve all external references.

(2) **Day Before Posting.** Post the notice and delete the old work copy. (This can be done in batch mode with an overnight execution request).

3. **COMMANDS.**

Examples of commands (with an explanation of each command) required for each document is as follows:

**Step 1. Specification Changes**

- `.list dire=/cegs09650.00/` (Means of determining the data set name.)
- `.space_0e9660.` (Reports the total number of storage locations for the specified data set.)
- `.dscr_(ge9660);340.` (Data set, twice the size of the cegs data set, created to store the notice and duplicate copy.)
- `.new_(work09650.00);2.` (Working copy of guide created and stored on data set ge9660. The backup option is set to 2. The document is immediately edited.)

2.2 (Enter description of work activity.)

**Step 2. Notice Cover Pages.**

- `.new_(u00109650.00);ge9660.` (Cover page document created and stored on data set ge9660 with an immediate edit.)

2.2 (Enter description of work activity.)
(Enter the header storage containing the guide name and notice number in parentheses.)

(Enter input mode.)

(enter the first page of the notice cover)

(blank line)

(blank line)

(Exit input mode.)

(On page 2, the header must be redefined to reflect the guide name, the notice number, and the date of the notice.)

(Enter input mode.)

(input the remainder of the cover page, if applicable)

(blank line)

(stor.)

(Editing work saved, enter system mode.)

Step 3. Production Instructions.

(new_1/00109650.00);ge9660.

(Production instruction document created and stored on data set ge9660 with an immediate edit.)

(Enter description of work activity.)

(Enter input mode.)

(Print with text and line number columns to user's current device, the complete notice cover page.)

(Reset paragraph and page number for the first page of the notice.)

(Print first page of text changed by notice for logic condition override, to user's current device, no initialization and notice 1 to be printed.)

(Reset paragraph and page number for the second page of the notice.)

(Print second page of text changed by notice for logic condition override, to user's current device, no initialization and notice 1 to be printed.)
Each page changed by the notice will be printed as shown above.

Step 4. Execution Instructions - (Before Posting).

`new(n00009650.00);ge9660.`  (Create the duplicate copy to contain the previous version of the guide.)

2.2  (Enter description of work activity.)

`du(cegs09650.00).`  (Duplicate the cegs document.)

`rr.`  (Resolve references.)

**NOTE:** Punctuation flags should be selected, i.e., `.fc_99;1.`, `.fc_98;1.`, etc.

`.stor.`  (Editing work saved, enter system mode.)

`.acce(n00009650.00);;all`  (Grant all users read access.)

`.exec(100109650.00).`  (Execute the production instruction document.)

`.logof.`  (Logoff the system.)

Step 5. **List the second print data set and make into a permanent data set.** Review the notice. After approval of the notice, the following commands may be issued.

`.delete(u000109650.00).`  (Delete the notice cover page document.)

`.delete(100109650.00).`  (Delete the production instruction document.)

`.udme(cegs09650.00);`  (Send the update message to all creators of documents referencing this document.)

Step 6. **Day before Posting.**

`.edit(cegs09650.00);;1.`  (Edit the cegs document with the external reference override switch set to 1.)

2.2  (Enter description of work activity.)

`.po(work09650.00).`  (Post the work copy to the cegs document.)

`.gs(.pr_16;1;x;void,not1;1;1;1;;;1-l.).`  (gs the guide.)

`.stor.`  (Editing work saved, enter system mode.)
.delete (work09650.00).

(Delete the work copy.)

.arch_ge9660.

(Archive the data set that contains the previous version of the guide.)

NOTE: This dataset is repeatedly used for all notices applicable to the guide; therefore, at least 2 hours before the preparation of the next notice, user must retrieve this data set back from archive storage.
NOTICES IN FORCE: As listed in paragraph 3. (N1 and N2 with basic provide all current pages.)

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS

CORPS OF ENGINEERS GUIDE SPECIFICATION
MILITARY CONSTRUCTION
ELEVATORS, HYDRAULIC

In bringing guide specifications up to date, three categories of actions are used, as follows:

Notice: This category is used chiefly to distribute changes made to bring references up to date but may also include minor technical changes for which coordination with industry is not required.

Change: This category comprises one or more replacement pages used to distribute changes that have been fully coordinated, including any necessary coordination with industry. Previous notices are incorporated.

Revision: This category describes a complete revision, in which all pages of a guide specification are brought up to date and republished, hereinafter referred to as a basic specification.

In addition to replacement pages issued as changes, notices for this guide specification are now issued as replacement pages. On notice pages, lines containing changes made since the last formal issue of the page, whether basic or change, are preceded by the number, in parentheses, of the last notice by which the line was changed. On change pages, asterisks appear before lines containing revisions of the previous formal issue of the page or before added or completely revised paragraphs and subparagraphs.

As with formal page changes, notices in this form are not cumulative, and pages herein should be retained until a replacement page of later date, either change or notice, is issued. Below is a list of current replacement pages for the January 1980 issue of CEGS-14250. C designates a change page as described above, for a page of the basic specification. N a notice page for a page of the basic specification, or a notice page for a change page.

Notice Page) Marked (Date -Page -Rev)

N # Date # Page
C # Dec 81 # 1
N # Nov 80 # 5
C # Nov 80 # 2
N # Dec 81 # 3

Figure 10.1. Notice Cover Page.

Preceding page blank
PROCEDURE FOR PREPARING PROJECT AMENDMENTS AND CHANGE ORDERS

1. GENERAL DESCRIPTION.

All text contained in both amendments and change orders can be prepared in EDITSPEC. The procedure for both activities are the same.

2. PROCEDURES.

Before preparing the first amendment or change order to a project, the project set cycle number (.pscn) command must be issued to set the cycle number to zero. For illustrative purposes assume Amendment 1 for project 99mx is ready to prepare.

a. Specification Changes. The specification text is corrected in each project section document. The .nn command will be entered to designate the lines changed by the amendment (change order). When all the project section documents have been corrected the amendment (change order) can be prepared.

b. Amendment (Change Order) Cover Page. A new project document must be created to contain the unique text of the cover page. The first four character project identifier for this document is the identifier of the project for which the amendment (change order) is being prepared (99mx). The fifth and sixth characters will be an "au" ("cu" for change orders). The last characters will be the sequentially numbered amendment (change order) being prepared (01). The first line of this document will always contain the definition of the amendment (change order) footer to be right justified on the same line as the page number. The operator will enter the amendment (change order) text for this issue (Figure 11.1). The data set name used to store the complete amendment (change order) is the four character prefix of the project (99mx) followed by the letters "co".

c. Production Instructions. A new document will be created to contain all production instructions to the EDITSPEC system. The document name will be the same as above except the fifth and sixth letters will be "ap" ("cp" for change orders). The last characters will be the sequentially numbered amendment (change order) being prepared. The operator will issue the input command and add all printing instructions. The first .edit, .pr, and .stor will print the amendment (change order) cover page. Apply one set of .edit, .bp, bn, and .pr commands for each sequential specification change required.

d. Execution Instructions. Apply the .exec command to produce the complete amendment (change order). The cover pages and production instructions document may be deleted after publication.

3. COMMANDS.

Example of commands (with an explanation of each command) required for each document is as follows.
Step 1. Specification Changes.

.*pscn_(99mx)**.  (Reset the cycle number to 0 for the complete project)

NOTE: The above command is done once for the first amendment. The command is issued again for the first change order.

.*.adit.(99=x04200.00). (Edit the first section involved by the amendment)

2.2 (Enter description of work activity)

.nn_1. (Notice number set to 1 for amendment 1)

(change text as required)

.*stor. (Editing work saved, enter system mode)

.*edit_(99mz04200.00). (Edit the next section)

2.2 (Enter description of work activity)

.nn_1. (Notice number set to 1 for amendment 1)

(change text as required)

.*stor. (Editing work saved, enter system mode)

NOTE: Edit all the sections changed by the amendment, set each notice number to 1, and change the text as required.

Step 2. Amendment Cover Page.

.*dscr_99mxco;150. (Create a data set with the project prefix followed by "co" large enough to store the complete amendment)

.*new_(99mzau01);99mxco. (Cover page document created on data set 99mxco with an immediate edit)

2.2 (Enter description of work activity)

.*en_;*/fs_(0001)3*/. (Enter the amendment number in the footer storage)

.*in. (Enter input mode)

(enter the amendment cover)
Step 3. Production Instructions.

2.2

(Note: Each page of each section of the amendment will be printed as shown above.)
Step 4. **Production Instruction Execution.**

```
.exec_99mxap01.  (Execute the production instruction
document)
```

**NOTE:** List the second print data set and make into a permanent data set.

Step 5. **Review the Amendment.**

After publishing delete the Amendment Cover Page and Production Instruction documents.

```
.dele_99mxau01.
.dele_99mxap01.
```
BIDDERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF THIS AMENDMENT ON THE BID FORM, IN THE SPACES PROVIDED, OR BY SEPARATE LETTER OR TELEGRAM PRIOR TO OPENING OF BIDS. FAILURE TO ACKNOWLEDGE ALL AMENDMENTS MAY CAUSE REJECTION OF THE BID.

DEPARTMENT OF THE ARMY
Huntsville Division, Corps of Engineers
PO Box 1600
Huntsville, Alabama 35807

NOTICE TO BIDDERS

Invitation for Bids No. DACA87-80-B-0053 for Construction of Load, Assemble, and Pack (LAP) Facilities at Mississippi Army Ammunition Plant, Bay St. Louis, Mississippi is amended in the following respects:

Delete The Following Sections
Substitute The Following Sections

Inclosed Pages (Am-1)

SPECIFICATIONS

VOLUME I

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A (Am-1), B (Am-1)

INFORMATION FOR BIDDERS

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BF-1, BF-2
BF-5, BF-6
BF-7, BF-8

INDEX OF GENERAL PROVISIONS

3 (Am-1)

GENERAL PROVISIONS

49, 50 (Am-1)
PROCEDURE 12
SPECIFICATIONS WRITING WITH EDITSPEC
TEXT EDITING SYSTEM

1. GENERAL.

The guidance contained herein is provided to furnish the engineer with one method of applying EDITSPEC text editing procedures to production of project specifications. No attempt has been made to cover all options.

2. WORKING COPY.

The draft copy of the guide may consist of a "list text print", a "print 2", or a formatted copy. Two versions (Cl listing - list text print and DI listing - formatted print) are created whenever a new guide or changes to an existing guide are made. This is the most economical method of obtaining a working copy of a guide. Other versions of the guide are obtained by entering the appropriate command. The list text print is an unformatted copy of the guide, with the exception of tables which are formatted, without paragraph numbers, containing computer codes. Generally the list text print is more difficult for the engineer to use and easier for the terminal operator. The print 2 consists of a semi-formatted copy of the guide, which contains a few computer codes. The print 2 is less difficult than the list text print for the engineer to use but more difficult for the terminal operator. The formatted copy is the same as the printed guide and is easiest for the engineer to use. However, its use requires transfer of revisions to the list text print or print 2 for use by the terminal operator. List text print includes flag list. Flag list must be requested with print 2 and cannot be used with formatted copy. Technical notes occur, after paragraph to which they apply and at the end of guides in list text print and print 2. Notes occur at the end of guides only in formatted copy.

3. PREPARATION OF PROJECT SECTION.

Marking of the guide from EDITSPEC for a project is nearly identical to the previous methods used by specification writers. Inapplicable text is marked out, new text is inserted in the appropriate location.

a. Flags. Within the text of the guide, the specification writer will encounter commands of the form "#f123;#phrases of guide text$#". These commands are called flags, and each flag is defined in the flag table preceding the guide text. Flags permit the engineer to mark a selected phrase at one location and have that phrase selected throughout the guide wherever the same choice of phrases occurs. Flags also permit the terminal operator to make desired changes easily without repeating commands. As each flag is encountered while reading the guide, the specification writer should refer to the flag table and make the desired choice of words for the flag number, or 'flag id' encountered. For example, where the following text is encountered:
Mortar for structural-clay-facing-unit or prefaced concrete / masonry-unit wainscots shall be cement of one brand and aggregates from one source, 100 percent passing the No. 8 sieve.

Pointing mortar in showers and kitchens shall contain ammonium stearate, or aluminum tri-stearate, or calcium stearate in an amount equal to 3 percent by weight of cement used.

The specification writer refers to the flag table and circles the appropriate flag choice (FCN)

SINGLE CHOICE FLAG ID = 17
LOCATED ON OR NEAR LINE NUMBERS 31000
*** FCN 1 showers /
*** FCN 2 kitchens /
*** FCN 3 showers and kitchens /
*** DES mortar application

Some flags are designated as multiple-choice flags in the flag table, and consist of a list of choices plus the appropriate punctuation and connecting word. The designer may select any number of choices in a multiple-choice flag, but will not select the punctuation or connecting word. The selected choice or choices will be inserted in the text in place of the internal flag command when the section is printed. Flags marked out of the guide text must be marked out of the flag table.

b. Other Internal Commands. Internal commands other than flags are used. Like flags, other internal commands are enclosed in asterisks. These commands are usually used for the purposes of; automatic numbering of paragraphs, pages, and sections; formatting of paragraphs, tables, headers, and footers; copying text from other locations; and indexing. Internal commands are executed when the camera ready copy is printed.

c. Keywords. Before writing any project unique text, specification writer should produce a list of project design conditions that are not covered in the guide. Each item in the list should have a keyword that briefly, accurately describes the condition. The operator will use the keywords to search an index of documents that contain project unique text with the same keywords. Specification writer may review the text and decide if it can be applied to the project.

d. Text insertion. The working copy will be marked for insertion of project unique text. Instructions to terminal operator should accurately describe both the old and new locations of text. Instructions should be in the following forms:

"Copy lines 700-1500 from cegs 03414 and insert after line 1400."
"Insert attached text after line 3500."
4. REVIEW DRAFT (IF REQUIRED).

Using EDITSPEC, some districts, but not all, use a typed review draft in final form. After the working copy has been marked up, flags selected, and project unique text developed, the terminal operator produces a draft section for review. Draft is printed as camera-ready copy containing line numbers. Specification writer will review the draft, mark changes, and

5. RESOLUTION OF REFERENCES AND PRINTING.

Before a project document is sent to print, it consists almost entirely of commands that copy text from other documents such as the guide specification and the master list of reference publications. Since these reference documents can be updated at any time, the project section must be changed to a stand-alone state at the time the document is sent to print. The terminal operator will issue a command to resolve external references, and the project section will be changed from copy commands to actual project text. At that point, the text is no longer automatically updated. External references should not be resolved until the project is ready for advertising.

6. INCORPORATION OF NOTICES.

At some point prior to printing the camera-ready copy for a section, the specification writer may be notified that a notice is being issued to the guide specification from which the project is being produced. If no action is taken, the notice will be automatically posted in the section of project specifications. If the specification writer decides not to incorporate the notice in the project section, instructions should be given to the terminal operator see other procedure.
PROCEDURE 13

SPECIFICATIONS WRITING WITH AUTOMATIC GENERATION

1. GENERAL.

The guidance contained herein is provided to furnish the engineer with one method of automatically generating project specifications using EDITSPEC. No attempt has been made to cover all options.

2. DESIGN CONDITION SECTION CHECKLIST.

The design condition checklist for each section gives design conditions that must be considered to produce a project specification section from a guide specification. The checklist is used in conjunction with a working copy of the guide specification and should be requested at the time the working or draft copy is requested.

3. WORKING COPY.

The working copy consists of guide text that is identified by pull identification numbers (ids). The pull ids are directly related to the numbered conditions in the design condition checklist. The purpose of the working copy is to provide the specification writer with reference points for insertion of project unique text, and the terminal operator with reference points (pull ids) for changing text after the project has been generated. If no unique text is needed and the writer does not wish to see the complete CE guide, a working copy will not be necessary.

4. PREPARATION OF PROJECT SECTION.

The checklist will be marked as described below, and the working copy reviewed to ensure that the guide covers all design conditions applicable to the project.

a. Checklist Instructions: One of the following actions is required for each checklist condition number.

(1) Mark with a check mark if the design condition is selected.
(2) Mark with an "X" if the design condition is rejected.
(3) Leave unmarked if it is unknown whether or not the design condition will be selected.

An asterisk (*) preceding a condition number indicates that the designer must provide additional information if that condition is checked.

Designers will ignore instructions to terminal operator, given in the form of "fl" or line numbers enclosed in parentheses.

If project is in concept stage, designer may leave some conditions unmarked until it is known whether or not the design conditions involved will exist in the completed design. Text for unmarked conditions will be provided for review.

13-1
If project is in final design stage, designer will mark all design conditions on the list. Revisions to checklist markings should be made in a manner that preserves the original markings to permit tracking the history of the specification development.

b. Text Insertion. It will be necessary to mark the working copy for insertion of project unique text. Instructions to Terminal Operator should accurately describe both the old and new locations of text.

c. Storage of Unique Text. Sections, paragraphs, and other segments of text which may be needed in the future and which are not contained in CE guide specifications should be stored in a separate document or documents. These sections, paragraphs, and text segments may then be used repetitively in the future as though they were CE guides.

d. Applicable Publications. No review of the reference publications is required unless new publications not covered by the guide are added. The publications are keyed to the correct text and are constantly updated in the master list of reference publications.

5. REVIEW DRAFT (IF REQUIRED).

Using EDITSPEC, some districts, but not all, use a typed review draft in final form. After the checklist and working copy have been marked, the terminal operator generates the draft section for review. Draft is printed as camera-ready copy containing line numbers. Specification writer will review the draft and the checklist, mark changes on draft or checklist if required, and submit for production of final camera-ready copy. Camera-ready copy may or may not carry line numbers.

6. RESOLUTION OF REFERENCES AND PRINTING.

Before a project document is sent to print, it consists almost entirely of commands that copy text from other documents such as the guide specification and the master list of reference publications. Since these reference documents can be updated at any time, the project section must be changed to a stand-alone state at the time the document is sent to print. The terminal operator will issue a command to resolve external references, and the project section will be changed from copy commands to actual project text. At that point, the text is no longer automatically updated. External references should not be resolved until the project is ready for advertising.

7. INCORPORATION OF NOTICES.

At some point prior to printing the camera-ready copy for a section, the specification writer may be notified that a notice is being issued to the guide specification from which the project is being produced. If the specification writer decides not to incorporate a notice in the project section, instructions should be given to the terminal operator to stop posting at the desired notice number. If no action is taken, the notice will be automatically posted in the section of project specifications.
PROCEDURE 14
GUIDE SPECIFICATION ADAPTATION PROCEDURE

1. PURPOSE.

Guide Specifications may require up to three phases of development for use in EDITSPEC. Phase I, flag identification, is the minimum effort required to prepare the guide for text editing. Phase II, design condition identification, is the additional effort required to prepare a guide for automatic generation. Phase III, integration into the CAEADS system, will not be addressed, since CAEADS is still under development. The following procedure provides guidance and a standard method for adaptation of guide specifications under Phases I and II. Examples from various Corps of Engineers Guide Specifications are presented where clarification of an activity is necessary.

2. PHASE I - FLAGS.

Flags are phrases within guide text where a project designer would need to input information. Designer input may involve inserting data in a blank space or selecting one or more choices from a list of choices. Flags provide the flexibility to adjust the wording of a phrase, to list all combinations of items where a choice is required, or to insert data, without affecting the remainder of the guide specification. Flag development consists of two activities—marking internal flag commands in the guide, and preparing the flag table using edit flag commands.

   a. **Internal Flags:** Phrases to be flagged will be marked in the following fashion: *f1ID;$text to be flagged*. The asterisks will denote the exact beginning and exact end of the phrase. The ID will be an integer between 1 and 99. Flag ID's will be numbered sequentially as each new flag is encountered in the text. As each new internal flag is identified, an edit flag using the same flag ID must be written for incorporation in the flag table. If flags have been identified at an earlier date, additional flag ID's must be inserted out of sequence.

   b. **Edit Flags:** The edit flag consists of three elements: ID, numbered choices, and a description. Each flag can have up to 99 choices with the description and choices limited to 200 EDITSPEC characters each. EDITSPEC characters are the same as typed characters, except a space counts as a character and a capital letter counts as two characters. In the list, each flag choice is separated from the following choice by a comma, and the last choice is followed by a semicolon and the description.

      (1) Each flag choice will be worded, capitalized and punctuated exactly as the text should appear when it is printed in place of the internal flag.

      (2) The flag description will be a concise statement that enables the designer to easily relate the choices to the location or function of that flag in the marked guide.
(3) A multiple choice flag should be used when many combinations of choices are possible, as in a list of items. Each item will be listed as a flag choice, the comma separating each item will be a choice, and the word connecting the last two items of the list will also be a choice. The comma and connecting word choices will be separated by a hyphen. During production of a project specification, the system will insert the comma, connecting word, or both in the correct sequence in the list.

(4) **Flag Table:** The list of edit flag commands is entered into the guide specification flag table. The system numbers each choice and lists the line number on which the corresponding internal flag appears in the guide. Each flag is identified as either a single-choice or multiple-choice flag by the system. When the table is listed for use by the project designer, each choice is listed separately to allow for easy selection of choices or to provide room for data insertion.

a. **Examples:**

(1) **Single Choice Flags:**

Internal Flag Marking: On *fl6; Concrete or Insulation* Surfaces:

Edit Flag Command: `.fl 6;(Concrete),(Insulation),(Concrete or Insulation);(type of roofing substrate).

Form in Flag Table: SINGLE CHOICE FLAG ID = 6
LOCATED ON OR NEAR LINE NUMBER 5100
*** FCN 1 Concrete /
*** FCN 2 Insulation /
*** FCN 3 Concrete or Insulation /
*** DES type of roofing substrate

NOTE: A space is required at the end of each flag choice unless the first character in the text following the internal flag is a punctuation mark. The slash character in the table is placed by the computer after the last EDITSPEC character of the choice and verifies the existence of the trailing space.

(2) **Multiple Choice Flags:**

Internal Flag Marking: *fl5; Cants, Crickets, Curbs, and Fills*:

Edit Flag Command: `.fl 5;(Cants),(Crickets),(Curbs),(Fills), (, )-( and );(roofing materials)

Form in Flag Table: MULTIPLE CHOICE FLAG ID: 5
LOCATED ON OR NEAR LINE NUMBER 11520
*** FCN 1 Cants/
*** FCN 2 Crickets/
*** FCN 3 Curbs/
*** FCN 4 Fills/
*** FCN 100 , /
*** FCN 200 and /
*** DES roofing materials
3. PHASE II - DESIGN CONDITIONS.

Design conditions are those conditions that must be considered by a designer when writing a project specification. For EDITSPEC purposes, a checklist will be produced that lists all design conditions covered by a guide specification. Each condition will be assigned a condition number. The condition number will be used to identify text that should be pulled from the guide specification and placed into a project specification when that condition exists.

a. Checklist: Each design condition will be a numbered, unique statement that requires a project designer to decide if that condition does or does not exist for the project. The first statement will always be the control condition used to identify text phrases that are used in every project specification. All other statements will be listed in the same general order as a designer would encounter the conditions during a project design, starting with conditions of higher priority and ending with conditions of a lower priority.

(1) Flags that require data insertion will be incorporated into a related design condition or will be included in a separate statement that specifies the exact type of data required, including units of measure if applicable. An asterisk will precede the condition number for statements that require data insertion. The flag ID for blank flags will be enclosed in parentheses at the end of the statement to alert the terminal operator. The statement will include a slash after the blank if punctuation follows the blank in the text, since the terminal operator will type a space after the data insertion if punctuation is not shown.

(2) Tables that require data insertion can be handled in a checklist by providing the specification writer with the spaces to fill in and providing the terminal operator with a copy table (CT) command to use when editing the project. The CT command is obtained after pull commands for the guide have been issued, and is of the form: (.ct ; pull id of 0 table column.)

(3) Reference publications should not be included in checklist statements. Such references require documentation for notice updating purposes—a problem that should be avoided whenever possible.

b. Text Identification: Each line, phrase, paragraph number and punctuation mark must be under control of at least one design condition before it can be pulled from a guide specification and placed in a project specification. To establish this pull control, the guide text is identified by marking the appropriate design condition number next to the text phrase that will be pulled by that condition. Any text phrase or body of text that is controlled by a set of design condition numbers is called a pull.
(1) Flag Pulls: Each choice listed for each flag ID in the flag table prepared during Phase I is a pull, and will be assigned the appropriate condition numbers. Flag pulls are identified in the PULL command by flag ID and flag choice number.

EXAMPLE - MARKING INTERNAL FLAGS

2. GENERAL: Metal toilet partitions including toilet enclosures, room entrance screens, and urinal screens shall conform to the layouts shown. At the locations indicated, anchorage to walls shall be by through-bolting. Color of panels shall be as selected from the manufacturer's standard colors.

EXAMPLE - MARKING FLAG CHOICES

MULTIPLE CHOICE FLAG ID = 1
*** FCN 1 toilet enclosures/
*** FCN 2 room entrance screens/
*** FCN 3 urinal screens/
*** FCN 100 /
*** FCN 200 and /
*** DES toilet partition type

SINGLE CHOICE FLAG ID = 2
*** FCN 1 through-bolting/
*** FCN 2 toggle-bolting/
*** FCN 3 through-bolting and toggle bolting/
*** DES wall anchorage

SINGLE CHOICE FLAG ID = 3
*** FCN 1 ....... /
*** DES partition color

(2) Line Pulls: Line pulls may be text phrases of any length, and are identified in the EDITSPEC PULL command by line numbers. Pulls that occur within a line or a paragraph will be separated from preceding and following pulls by slash marks, and the appropriate design conditions will be written directly above or otherwise clearly related to the text to be pulled. Longer bodies of text such as paragraphs will be bracketed in the margin, with the condition numbers next to the bracket.

EXAMPLE - MARKING TEXT LINES

LINE PULLS

/4. TOILET ENCLOSURES shall conform to Fed. Spec. RR-P-1550, Type I, Style A B C. Width of toilet enclosures shall be as shown. Finish surface of panels shall be baked enamel. Panels indicated to receive toilet paper holders or grab bars as specified in SECTION: TOILET ACCESSORIES shall be reinforced for the reception of the items required.
5. ROOM ENTRANCE SCREENS shall conform to Fed. Spec RR-P-1352, Type II, Style A. Finish surface of screens shall be baked enamel. Length and height of screens shall be as shown.

6. URINAL SCREENS shall conform to Fed. Spec. RR-P-1352, Type III, Style A finish surface of screens shall be baked enamel. Width of screens shall be 24 inches wide.

(3) Row and Column Pulls: Condition numbers for each table column will be marked above the column header. Condition numbers for each row will be marked to the left of the row. Both the row and column conditions must be satisfied before a table position is pulled. If none of the positions under a column are pulled, the header for that column will not be pulled. Table text is identified in the PULL command by column and row number.

### TABLE II. FIRE-RATED MASONRY UNITS

<table>
<thead>
<tr>
<th>Aggregate Type</th>
<th>Minimum Equivalent Thickness in Inches for Fire Rating of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 hours</td>
</tr>
<tr>
<td>Pumice</td>
<td>4.7</td>
</tr>
<tr>
<td>Expanded slag</td>
<td>5.0</td>
</tr>
<tr>
<td>Expanded clay, shale, or slate</td>
<td>5.7</td>
</tr>
<tr>
<td>Limestone, scoria, cinders or unexpanded slag</td>
<td>5.9</td>
</tr>
<tr>
<td>Calcareous gravel</td>
<td>6.2</td>
</tr>
<tr>
<td>Siliceous gravel</td>
<td>6.7</td>
</tr>
</tbody>
</table>

a. Rules for Assigning Condition Numbers: The following rules represent the design capability and limitations of EDITSPEC in regard to pulling of text.

(1) When several conditions can be applied to the same line, flag, column, or row pull, they are classified as either dependent or independent and marked in the guide text as follows:

(a) Dependent - all of the conditions must exist before the phrase is pulled. Condition numbers are not separated by commas.

**EXAMPLE - DEPENDENT CONDITIONS**

14.1 Perimeter Felt Joints: Construction joints between interior slabs on grade and vertical surfaces shall consist of 30-pound asphalt-saturated felt, extending for the full depth of the slab. The perimeters of the slabs shall be free of fins, rough edges, spalling, or other unsightly appearance.
(b) Independent - any one of the conditions will pull the phrase. Condition numbers are separated by commas.

EXAMPLE - INDEPENDENT CONDITIONS

12. Perimeter Insulation: Perimeter insulation shall be applied with adhesive to the interior surface of foundation walls, extending from the underside of the slab to the depth indicated.

(c) Negative dependent - all of the conditions must not exist before the phrase is pulled. First condition number is preceded by a minus sign (-), condition numbers are not separated by commas.

(d) Negative independent - any one of the conditions must not exist for the phrase to be pulled. First condition number is preceded by a minus sign (-), and all condition numbers are separated by commas.

(e) Dependent and independent marking cannot be used on the same pull.

(f) Positive and negative marking cannot be used for the same pull.

(2) Where flag choices are pulled by dependent conditions, the first choice listed for the flag must have the least number of dependent conditions and the last choice must have the highest number of dependent conditions.

EXAMPLE - PULLING FLAG CHOICES WITH DEPENDENT CONDITIONS

<table>
<thead>
<tr>
<th>Flag ID</th>
<th>Flag Choice Number</th>
<th>Design Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Precast Gypsum</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Cast-In-Place Gypsum</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Insulating Concrete</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Precast Gypsum or Cast-In-Place Gypsum</td>
<td>6, 7</td>
</tr>
<tr>
<td>5</td>
<td>Precast Gypsum or Insulating Concrete</td>
<td>6, 8</td>
</tr>
<tr>
<td>6</td>
<td>Cast-In-Place Gypsum or Insulating Concrete</td>
<td>7, 8</td>
</tr>
<tr>
<td>7</td>
<td>Precast Gypsum, Cast-In-Place Gypsum or Insulating Concrete</td>
<td>6, 7, 8</td>
</tr>
</tbody>
</table>

14-6
(3) Where a combination of both dependent and independent conditions is possible for a flag choice, the choice can be duplicated in the flag table so that each duplication is pulled by dependent conditions only. All the duplications can have the same flag choice number.

**EXAMPLE - PULLING FLAG CHOICES WITH BOTH DEPENDENT AND INDEPENDENT CONDITIONS.**

<table>
<thead>
<tr>
<th>Flag ID</th>
<th>Flag Choice Number</th>
<th>Design Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1 Concrete</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>2 Insulation</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>3 Concrete or Insulation</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>3 Concrete or Insulation</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>3 Concrete or Insulation</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>3 Concrete or Insulation</td>
<td>A, B</td>
</tr>
</tbody>
</table>

(4) Internal flags (within the text) are pulled by line pulls. Choice from the edit flag (within the flag table) are pulled only if the line containing the corresponding internal flag is pulled.

a. **PULL Command:** This command is the final link in relating guide text to design conditions in the checklist. After the text is completely identified, the terminal operator separates the text, beginning text on a new line wherever slash marks are encountered in the markup. Each line is numbered by the computer and a text listing is printed for use in coding of PULL commands. A PULL command is written for each pull encountered in the text. The coding identifies positive or negative; and where the text was stored. The order in which the PULL commands are listed determines the order in which pulls are printed in a project. In the PULL command list, all the column pulls for a table must be listed before the row pulls. A table header is pulled using a column pull for a zero (0) column. The comma and connecting word choices for a multiple choice flag are pulled using a flag pull for a zero (0) flag choice number, and using condition 1.

(1) **Evaluation Mode:** The various classes of pulls are assigned evaluation mode numbers in the pull command as follows:

- Independent conditions - 0
- Dependent conditions - 1
- Negative independent conditions - 2
- Negative dependent conditions - 3

(2) **Type of Text:** The various types of text are assigned the following letters in the pull command:

- Text lines - 1
- Text flags - f
- Table columns - c
- Table rows - r
b. **Checkout.** After entering pull commands into the guide specification, the user should list the pulls and check them against the text to ensure that no typing errors have been made. The PLTX table has been developed for checkout purposes.

c. **Logic Conditions:** Related text phrases from different documents or from within a document can be tied together using the LOGIC CONDITION command. In automatic generation, a project spec writer would be alerted if he tried to use one text phrase that is logically connected to another phrase. Logic conditions also have applications to Phase III of EDITSPEC development.

d. **SPEC Command:** After each guide specification has been completely marked for automatic text pulling, the computer must be informed of the total number of design conditions defined in the checklist. The SPEC command using the last 8 characters of the guide name and the "add" option is used to define the total conditions. In the event that a notice change affects the number of conditions in the checklist, the old number of conditions will be changed using the SPEC command.

e. **Example.** An example of guide CEGS10160.00 follows. The example shows the text marked for flags and pulls (Figure 14.1), the checklist (Figure 14.2), instructions for completing the checklist (Figure 14.3), a listing of text after the operator breaks out the pulls (Figure 14.4), and the pull commands (Figure 14.5). The listing of text is not the version that will be used by a project specification writer, but will be used for reference by the user who writes the pull commands.

4. **GENERAL IDENTIFICATION**

a. **Master Chronological List.** This list is a table that contains a list of applicable publications and guide specifications in the order issued. The document name is REFMASTERCL. Applicable publications for guides are copied from this document.

b. **Master Index.** The document CEGSMASTERIX, or EP 310-1-5, consists of *CT* commands copying from REFMASTERCL. In the master index, guide specifications are listed in numerical order of document numbers. Applicable publications are also listed in a definite order for publication purposes.

c. **Master Printing Order.** The document CEGSMASTERSP consists of *CO* commands, each of which copies an entire guide specification. The order in which the guide specs are copied into MASTERSP determines the printing order of sections when a project specification is produced using the PRINT PROJECT COMMAND.

d. **Master Design Conditions.** Design conditions should be written defining when each document listed in the MASTERSP will be required in a project. The total number of conditions will be defined using the command: .spec mastersp;a;number.
DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
November 1978
CEGS-10160
March 1977
CE-10160
October 1974

CORPS OF ENGINEERS GUIDE SPECIFICATION
MILITARY CONSTRUCTION

SECTION 10

METAL TOILET PARTITIONS

1. APPLICABLE PUBLICATION: The Federal Specification (Fed. Spec.) listed below forms a part of this specification to the extent referenced. The publication is referred to in the text by the basic designation only.

2. GENERAL: Metal toilet partitions, including toilet enclosures, room entrance screens, and urinal screens, shall conform to the layouts shown. At the locations indicated, anchorage to walls shall be by through-bolting. Color of panels shall be as selected from the manufacturer's standard colors.

3. SHOP DRAWINGS: Shop drawings shall be submitted for approval in accordance with the SPECIAL PROVISIONS. Shop drawings shall show plans, elevations, details of construction, gages of metal, hardware, reinforcing, fittings, mountings, and anchorings.

4. TOILET ENCLOSURES shall conform to Fed. Spec. RR-P-1352, Type I, Style A. Width of toilet enclosures shall be as shown. Finish surface of panels shall be baked enamel. Panels indicated to receive toilet paper holders or grab bars shall be as specified in SECTION: TOILET ACCESSORIES.

5. ROOM ENTRANCE SCREENS shall conform to Fed. Spec. RR-P-1352, Type II, Style A. Finish surface of screens shall be baked enamel. Length and height of screens shall be as shown.

6. URINAL SCREENS shall conform to Fed. Spec. RR-P-1352, Type III, Style A. Finish surface of screens shall be baked enamel. Style A screens shall be 24 inches wide.

INSTALLATION: Toilet partitions shall be installed straight and plumb with all horizontal lines level and rigidly anchored to the supporting construction. Drilling and cutting for installation of anchors shall be at locations that will be concealed in the finished work. Doors shall have a uniform vertical edge clearance of approximately 3/16 inch and shall rest open at approximately 30 degrees when unlatched. Baked enamel finish shall be touched-up with the same type and color of paint that was used for the finish. Toilet partitions shall be cleaned and protected from damage until acceptance.

Figure 14-1. Guide Specification

14-9
### CONCEPT DESIGN

**Condition Number** | **Design Conditions**
--- | ---
1 | Control Condition (No Action Required)

### FINAL DESIGN

**Condition Number** | **Design Conditions**
--- | ---
2 | Toilet Partition Type:
3 | Toilet Enclosure
4 | Room Entrance Screen
5 | Urinal Screen

*5 | Partition Color: * (f12)

6 | Toilet Enclosure Style:
7 | Floor-Supported (Style A)
8 | Ceiling-Hung (Style B)
9 | Overhead-Braced (Style C)

**Condition Number** | **Design Conditions**
--- | ---
10 | Urinal Screen Style:
11 | Floor-Supported, 24-Inch Width
12 | Floor-Supported, 36-Inch Width
13 | Wall-Hung (Style D)

**Condition Number** | **Design Conditions**
--- | ---
14 | Wall Anchorage:
15 | Through-Bolts
16 | Toggle Bolts
17 | Toilet Enclosure Accessories:
18 | Toilet Paper Holders
19 | Grab Bars

Figure 14.2. Design Condition Checklist
INSTRUCTIONS FOR MARKING
DESIGN CONDITION CHECKLIST

Preparing the Project Specification Using Automatic Generation: Checklist will be marked as described below, and working copy will be reviewed to ensure that the guide covers all design conditions applicable to the project.

a. Checklist Instructions: One of the following actions is required for each checklist condition number:

(1) Mark with a check mark if the design condition is true.
(2) Mark with an "X" if the design condition is false.
(3) Leave unmarked if the design condition is unknown.

An asterisk (*) preceding a condition number indicates that the designer must provide additional information if that condition is checked.

Designer will ignore instructions to terminal operator, given in the form of "fl" or line numbers enclosed in parentheses.

Mark with a check the appropriate design stage. If project is in concept stage, designer may leave some conditions unmarked. Text for unmarked conditions will be provided for review. If project is in final design stage, designer will mark all design conditions on the list. Revisions to checklist markings will be made in a manner that preserves the original markings.

At the end of the checklist, add a list of conditions not covered in the guide specification. Each statement should be a key word that briefly describes the condition. The operator will use the key words to locate text used for similar conditions in different projects.

b. Text Insertion: Mark the working copy where project unique text will be inserted. Instructions to terminal operator should accurately describe by line number both the old and new locations of text to be inserted.

Figure 14.3. Instruction For Completing Checklist
<table>
<thead>
<tr>
<th>SEGMENT ID</th>
<th>LINE NO.</th>
<th>MCH</th>
<th>TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>proj</td>
<td>10</td>
<td>7</td>
<td><em>a3a</em> /</td>
</tr>
<tr>
<td>proj</td>
<td>20</td>
<td>10</td>
<td>*a11 a1a /</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>90</td>
<td>0/</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>100</td>
<td><em>11 DEPARTMENT OF THE ARMY</em> /</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>200</td>
<td>*11 (-1) CEGS-10160 a1a /</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>300</td>
<td><em>11 OFFICE OF THE CHIEF OF ENGINEERS</em> /</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>400</td>
<td>*11 (-11) March 1977a 0a1a /</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>500</td>
<td>*11 (-11) Superceding a1a /</td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>600</td>
<td>*11 (-11) CE-10160 a1a /</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>700</td>
<td>*c1 Notice 3a a1a /</td>
</tr>
<tr>
<td></td>
<td>110</td>
<td>800</td>
<td>*c1 December 1976 a1a /</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>900</td>
<td>*c1 CURPS UP ENGINEERS GUIDE SPECIFICATION a1a /</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>1100</td>
<td>*c1 MILITARY CONSTRUCTION a1a /</td>
</tr>
<tr>
<td></td>
<td>140</td>
<td>1200</td>
<td>*c1 SECTION ..... a /</td>
</tr>
<tr>
<td>proj</td>
<td>150</td>
<td>1600</td>
<td><em>p2a26</em> /</td>
</tr>
<tr>
<td></td>
<td>170</td>
<td>1550</td>
<td>*a11 a /</td>
</tr>
<tr>
<td>notl</td>
<td>180</td>
<td>1600</td>
<td>*a11 a1a /</td>
</tr>
<tr>
<td></td>
<td>190</td>
<td>1700</td>
<td>*c1 METAL TOILET PARTITIONS a1a /</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>1800</td>
<td>*c1 (B) a, a1a /</td>
</tr>
<tr>
<td></td>
<td>210</td>
<td>1900</td>
<td>*a11 a /</td>
</tr>
<tr>
<td>-50021900</td>
<td>220</td>
<td>2000</td>
<td>*a11a a1a /</td>
</tr>
<tr>
<td>-50021900</td>
<td>230</td>
<td>2100</td>
<td>*c1 a1a /</td>
</tr>
<tr>
<td>-50021900</td>
<td>240</td>
<td>2200</td>
<td>*c1 GENERAL: Metal toilet partitions, including /</td>
</tr>
<tr>
<td></td>
<td>250</td>
<td>2300</td>
<td><em>f11: toilet enclosures, room entrance screens and urinal screens</em> a, shall conform to the /</td>
</tr>
<tr>
<td></td>
<td>260</td>
<td>2400</td>
<td>*layout shown. At the locations indicated, anchorages to walls shall be by /</td>
</tr>
<tr>
<td></td>
<td>270</td>
<td>2500</td>
<td><em>f12: through-holing</em> a. Color of panels shall be f13: 1... 5 a, as selected from the /</td>
</tr>
<tr>
<td></td>
<td>280</td>
<td>2600</td>
<td>manufacturer's standard colors. /</td>
</tr>
<tr>
<td></td>
<td>290</td>
<td>2700</td>
<td>*co : 11:7600-7900 a /</td>
</tr>
</tbody>
</table>

Figure 14.4. Working Copy (List Text).
C. Paragraph 2: Toilet partitions and
urinal screens in barracks, and other hard usage areas,
as well as those partitions on which grab bars are to
be mounted, will be indicated to be bolted to walls.
Through-bolting will be specified for those
applications, except toggle bolts may be specified when
through-bolting would be exposed in a finished room or
would otherwise be unsuitable.

2700 244 note 1: SHOP DRAWINGS: Shop drawings shall be submitted
2800 for approval in accordance with the SPECIAL PROVISIONS. /
2900 Shop drawings shall show plans, elevations, details of construction, gages /
3000 of metal, hardware, reinforcing, fittings, mountings, and anchorings. /

note 1 3010 28 note 14: note 1 1

3100 310 TOILET ENCLOSURES shall conform to /
3200 note 2 324 Fed. Spec. RR-P-1552, Type I, Style 14, Size [H]: Width /
3300 331 of toilet enclosures shall be as shown. Finish surface of panels shall be baked enamel. /
3400 note 2 341 Female indicated to receive 14; toilet paper holders or grab bars? /
3500 350 as specified in SECTION: TOILET ACCESSORIES /
3600 360 shall be reinforced for the reception of the items required. /

note 2 3610 19 note 14: 8000-9700 /

D. Paragraph 4: Metal toilet partitions
with an enamel finish are suitable for use in
installations where the partitions are subjected to
normal usage and exposure conditions. Metal toilet
partitions will not be used where severe water
conditions will be encountered, such as where cleaning
is to be performed by spraying water.

E. Paragraph 4: Floor-supported enclosures,
Style A, will be used generally; and overhead-braced
enclosures, Style C, will be used when pilasters cannot
be anchored into structural concrete. Ceiling hung
enclosures, Style B, will be used only when the
additional cost is justified for reasons of sanitation
appearance.

- Enclosure widths of 32 inches, 34 inches, and 36 inches
are readily available. Except for enclosures without
doors, widths other than those mentioned will be
avoided.

This section will be coordinated with SECTION: TOILET
ACCESSORIES and the drawings regarding toilet
enclosures which have toilet paper holders and/or
grab bars attached to the panels.

note 1 3620 26 note 14: note 1 14


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- **F.** Paragraph 5: Length and height of room entrance screens will be shown on the drawings, using standard size panels and pilasters to the maximum extent practicable. |

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- **G.** Paragraph 6: A urinal screen between |
| 100 | individual urinals is generally not necessary or desirable. Use of urinal screens will be limited to those applications where sanitary protection is required, such as between a urinal and an immediately adjacent lavatory. Wall-hung urinal screens will be used only where the supporting construction is masonry or concrete. |

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- **NOT** |
| NOT | 4800 | 25 | *Sub 1: GENERAL NOTES: / |

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*Figure 14.4. Working Copy (List Text). Cont.*
The capital letters in the right margins indicate that there is a technical note pertaining to that portion of the guide specification. It is intended that the letters in the margins be deleted before typing the project specifications. Where numbers, symbols, words, phrases, clauses, or sentences in this specification are enclosed in brackets [], a choice or modification must be made. Delete inapplicable portion(s) carefully. Where blank spaces occur in sentences, insert the appropriate data. Where entire paragraphs are not applicable, they should be deleted completely. 

Technical Notes:

Paragraph 1: The section number should be inserted in the specification heading and prefixed to each page number in project specifications.

Paragraph 2: Toilet partitions and urinal screens in barracks, and other hard-use areas, as well as those partitions on which grab bars are to be mounted, will be indicated to be bolted to walls. Through-bolting will be specified for these applications, except toggle bolts may be specified when through-bolting would be exposed in a finished room or would otherwise be unsuitable.

Paragraph 4: Metal toilet partitions with an enamel finish are suitable for use in installations where the partitions are subjected to normal usage and exposure conditions. Metal toilet partitions will not be used where severe water conditions will be encountered, such as where cleaning is to be performed by spraying water.

Paragraph 5: Floor-supported enclosures, Style A, will be used generally; and overhead-braced enclosures, Style C, will be used when pilasters cannot be anchored into structural concrete. Ceiling hung enclosures, Style B, will be used only when the additional cost is justified for reasons of sanitation or appearance.

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Figure 14.4. Working Copy (List Text). Cont.
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