US Army Corps
of Engineers ®

EIRS Bulletin

Engineering Improvement Recommendation System

No. 99-01 Date: 12 April 1999

The Engineering Improvement Recommendation System Bulletin is part of our Information Feedback System and is used in military construction programs to expedite dissemination of information regarding problems. The probable solutions included in the EIRS BULLETIN have not been thoroughly explored or staffed. Accordingly, these probable solutions do not represent a final HQUSACE position, and their use is not mandatory. Probable solutions are considered as informational in nature for the purpose of permitting prompt consideration by the field. EIRS Bulletin recipients are encouraged to comment on the probable solutions presented so that other viewpoints can be considered in the development of the final HQUSACE position. Since changes to criteria approved by ENG Form 3078, Recommended Changes to Engineering Documents, are expected to remain firm, they are identified as final solutions and should be used in current design. To defray printing costs, local reproduction of this bulletin is authorized. This issue of the EIRS Bulletin contains seven enclosures as follows:

ENCL 1: Carbon Monoxide Alarms in New Family Housing

ENCL 2: SPECSINTACT, Version 3

ENCL3: CREATING PDF FILES FOR ELECTRONIC BID SOLICITATIONS (EBS)

ENCL 4: FURNITURE ASSOCIATED WITH MILITARY CONSTRUCTION

ENCL 5: REVISIONS MADE TO THE CHILD DEVELOPMENT CENTERS (CDC)

ENCL 6: ENG Form 3078 Follow-up Actions

ENCL 7: Current Design Crtieria

FOR THE COMMANDER:

7 Encls

DWIGHT A. BERANEK, P.E.
Chief, Engineering and Construction Division
Directorate of Military Programs

Prepared in accordance with AR 25-30 by HQUSACE Directorate of Military Programs, 20 Massachusetts Ave., NW, Washington, DC 20314

EIRS BULLETIN
99-01

ENGINEERING AND DESIGN

Carbon Monoxide Alarms in New Family Housing:

a. Problem: Carbon monoxide (CO) is an invisible, odorless, poisonous gas that can be fatal when inhaled in sufficient amounts. CO is the number one cause of poisoning deaths in the United States. According to the Journal of the American Medical Association, unintentional CO poisoning causes approximately 2000 deaths and more than 10,000 injuries in the U.S. each year. In November 1998, the Navy lost four members of a family due to CO poisoning. CO can be produced from any fuel-burning appliance that is malfunctioning such as furnaces, gas ranges/stoves, gas dryers and water heaters. CO can also be produced from fireplaces and wood burning stoves, from vehicles running in an attached garage (even when an outside door is open), from blocked chimneys or flues, and from back drafting. Symptoms of CO poisoning are similar to the flu with no fever. They include dizziness, headache, nausea, fatigue, irregular breathing and confusion.

b. Solution: Carbon monoxide (CO) alarms will be provided for new family housing and renovated family housing that are equipped with a fuel burning appliance inside of the unit, or a fireplace, or an attached garage. CO alarms will be provided as follows:

(1) One CO alarm will be located on each level of the housing unit. A required alarm will be located in vicinity of the bedrooms, such as in the corridor outside of the bedrooms. CO alarms should not be provided in garages, furnace rooms, unfinished basements or unfinished attics.

(2) CO alarms will be hardwired and wall-mounted at the same height as the thermostat, approximately 52 inches off the floor. Dead air spaces such as corners should be avoided. Units may be wired to circuits powering smoke detectors. In all cases, manufacturer's guidelines and recommendations will be followed.

(3) CO alarms will be equipped with an audible alarm, continuous digital display, peak level memory, test button, and test reset button and be UL listed by passing standard test UL 2034.

c. Applicability: This EIRS Bulletin is applicable to new housing construction and major renovation projects. Detectors for existing housing which are not undergoing major renovations will be addressed by ACSIM in the near future. Implementation of these criteria has special application as defined by Paragraph 8c of ER 1110-345-100. These criteria will be incorporated into Technical Instructions TI 801-02, *Family Housing*.

Encl. 1

EIRS BULLETIN
99-01

ENGINEERING AND DESIGN

SPECSINTACT, Version 3:

a. Problem: Computer software must be continually adjusted to take advantage of advancing operating systems and to meet user needs. SPECSINTACT software for the production of project specifications has undergone many changes over the years and must continue to do so as necessary to keep up with advances in technology.

b. Probable Solution: SPECSINTACT, Version 3, is currently under development and will be released later this year following completion of testing. This version of SPECSINTACT, as well as the SPECSINTACT WordSpec application, is designed for running on Windows 95/98/2000/NT will provide improved user interface as well as 32-bit performance. Additional information regarding SPECSINTACT, Version 3, is attached.

Encl 2 (2 pages)

EIRS BULLETIN
99-01

SPECSINTACT - Version 3

SPECSINTACT Version 3 will display jobs and masters concurrently in a view similar to the Windows Explorer, with iconized lists of sections and processed files. Users will be able to add specification sections to a job or master by mouse-clicking and dragging the icons for these sections to the icon for the desired job or master. The new software will also take better advantage of the right mouse button, giving users easier access to commonly used commands.

The SPECSINTACT interface and WordSpec will be incompatible with 16-bit versions of Windows (such as Windows 3.1), although the SPECSINTACT Editor will continue to work with all versions of the Windows operating system. Also, the new version of WordSpec will require Microsoft Word 97. Users who have earlier versions of Windows or Word may continue to use the previous,16-bit versions of the SPECSINTACT software. Limited support for older versions of SPECSINTACT will continue, although this support may be discontinued at some time in the future.

SPECSINTACT will continue to provide the same specification editing and processing capabilities that users of the system have come to expect. The printing and processing routines will provide some improvements in accuracy and automation, but will otherwise be unchanged. The SPECSINTACT Editor will continue to work with both the new and the old versions of SPECSINTACT.

SPECSINTACT will also continue to provide quality assurance reports and automated functions that reduce the time required to complete project specifications. The reports verify the accuracy of technical references, submittal requirements, testing and other requirements, section references, and bracketed options. The automated functions a variety of tasks necessary for specification preparation, including the generation of tables of contents for projects and sections, the creation of customized submittal and reference address sections, paragraph renumbering, and the removal of notes from the printed specification, will also continue.

ENGINEERING AND DESIGN

Creating PDF Files for Electronic Bid Solicitations (EBS):

a. Problem: Creating PDF files of the technical sections of a project for Electronic Bid Solicitaions (EBS) is a tedious task when performed one file at a time.

b. Probable Solution: Using SPECSINTACT, Version 2.7.3 or later, software, PDF files for all the technical sections of a project can be created in a single operation. The procedure is as follows:

(1) From the JOBS menu, select the job to be worked on and select Print.

(2) From the JOB PRINT menu, select Printer Setup and set the printer as Acrobat PDFWriter. Still at the JOB PRINT menu, make the other choices to meet your need, then select Print.

(3) When prompted by PDFWriter, establish the name you want for the output files and the folder for deposit of the files.

(4) In a reasonably short period of time the job is done.

EIRS BULLETIN
99-01

ENGINEERING AND DESIGN

Furniture Associated With Military Construction:

a. Problem: USACE activities have raised the question, "Can furniture be provided in the construction contract?"

b. Probable Solution: AR 415-15, Appendix H, and ER 1110-345-122, Interior Design, 22 March 1999, indicate how furniture should be designed and provided. The following is a brief summary of issues:

(1) Federal Prison Industries (FPI) is a mandatory source for most furniture and furnishing products. A waiver or clearance from FPI must be obtained prior to proceeding to other sources of supply. When FPI provides furniture or other products, they should be provided by a supply and services type contract, not the construction contract.

(2) When furniture is provided utilizing GSA Schedules or specifications, a separate contract for furniture and furnishings is generally the better and more cost effective approach. Furniture can also be provided through the construction contract.

(3) With the publication of ER 1110-345-122, 22 March 1999, the following prior EIRS Bulletins, which defined special procedures for providing prewired work stations are withdrawn:

(a) EIRS Bulletin 96-03, Enclosure 5, Prewired Work Stations in Military Construction.

(b) EIRS Bulletin 95-07, Enclosure 4, Prewired Work Stations in Military Construction.

c. Implementation: The implementation of this policy is considered to have ***special application*** as defined by ER 1110-345-100.

d. Additional Information: For additional information concerning prewired work stations, contact Mr. Frank A. Norcross, CEMP-ET, telephone (202) 761-0881, or email frank.a.norcross@hq02.usace.army.mil.

EIRS BULLETIN
99-01

ENGINEERING AND DESIGN

Revisions Made to the Child Development Centers (CDC):

a. Problem: Based on lessons-learned and feedback received from the design and construction of recent CDC facilities that were based on the Department of the Army (DA) Standard Design Packages for the CDC, the following deficiencies needed to be addressed:

Since small children have a tendency to use and accumulate large amount of water, components of the current counter tops and surrounding wood components have tended to deteriorate. Because of this excessive water, many of the laminated surfaces currently installed in CDC have experienced problems. The problems most encountered are plastic top de-lamination, eroding joint caulking, deterioration of vanity doors below the counter top, and wearing out of the plastic laminate due to excessive cleaning. The primary area where deterioration is occurring is in area with heavy water use i.e. at children's sinks, diaper change stations.

b. Probable Solution:

(1) Countertops: Modify the standard design to encourage the use of solid surfacing materials such as cultured marble or solid surfacing (Corian or similar surfacing) for all counter tops.

(2) Caulking: Standing water and continuous cleaning tends to deteriorate the caulking between the sink and the counter top and between the back splash and the top. CDC Standard Design will be modified to encourage the use of either an integral sink or a sink mounted under the solid surfacing counter top. This will limit or eliminate deterioration of caulking around the sink. For back splash. Recommend making the back splash an integral part of the counter top whereby eliminating the joint.

(3) Containment of Water: Currently within CDC, a radius or rounded edge is required for exposed horizontal counter top edges. While most installation have complied with this requirements, the radius edges placed on most laminated counter tops did not provide sufficient slope or height to keep water from running over the radius edge or to direct excess water back into the sink. Water spilling or running over the edge lands on the cabinet doors below, causing deterioration of the doors. Two alternatives are available to prevent or limit water from leaking over the edge and onto

the cabinet doors below. First, the radius edge should have sufficient slope and height to prevent water from running over that edge. If an integral or an under-counter-mounted sink is used, this will assist in water draining back into the sink.

(4) Maintenance: With the reduction of joints and the elimination of water absorbing substrate, maintenance concerns will be greatly decreased. Furthermore, an integral or under-counter sink will facilitate cleaning of the counter top and sink.

c. Implementation: In accordance with AR 415-15 and ER 1110-3-113, the use of designs developed under the DA Facilities Standardization Program, such as the DA Standard Design Packages for CDC, are mandatory for use and unjustifiable deviations will not be made. The implementation of these revisions is considered to have routine application.

d. Additional Information: For additional information concerning the revisions to the Standard Design Packages, contact:

Center of Standardization (COS) for CDC:
Mr. Robert E. Riffel, R.A., CEHNC-ED-CS-A
Telephone: (256) 895-1670
Facsimile: (256) 895-1602
E-mail: robert.e.riffel@hnd01.usace.army.mil

HQUSACE Proponent for CDC:
Mr. Stanley J. Swofford, R.A., CEMP-ET
Telephone: (202) 761-0441
Facsimile: (202) 761-8815
E-mail: stanley.j.swoffod@usace.army.mil

EIRS BULLETIN
99-01

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

ENG Form 3078 Follow-up Actions:

a. Problem: ENG Forms 3078 which indicate an affirmative action by HQUSACE are provided to the originating USACE Commands. Since the ENG Forms 3078 will result in changes to the criteria and guidance, all USACE Commands should receive the same information to be used in criteria designs.

b. Probable Solution: Reviewed ENG Forms 3078 which make a commitment to change guide specifications, manuals, etc. will be included in the EIRS Bulletin, unless the change has been accomplished. This enclosure includes a copy of approved ENG Forms 3078.

Encl 6 (39 pages)

EIRS BULLETIN
99-01

ENG FORMS 3078

CONTROL NO.	PUB NO.	OFFICE SYMBOL
1068	CEGS-01451	CENWO-CD
1070	CEGS-13202	CENWO-CD-QT
1075	CEGS-15400	CENWO-CD
1076	CEGS-05120	CENAB-CO
1077	CEGS-15400	CEMP-EC
1080	CEGS-08700	CENWD-ET
1083	CEGS-02821	CENWO-CD
1085	CEGS-01330	CESWF-EC
1086	CEGS-15950 / CEGS-15951	CENAB-EN
1087	STD DWG 721-10-02	CENAB-EN
1088	CEGS-15951	CENAB-EN
ID-17	CEGS-09250	CESAS-CD-QT
ID-25	CEGS-15653	CELRL
ID-26	CEGS-01000	CENWK-PE-C
ID-29	Form 3078	CEPOD-ET-E
ID-34	CEGS-14240	CESAM-EN-DR

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENWO-CD-QT, 20 May 1998

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 01451 (04/97)	Contractor Quality Control

DOCUMENT TYPE

- ☐ DRAWING ((STANDARD) (DEFINITIVE))
- ☒ SPECIFICATION ((GUIDE) (STANDARD))
- ☐ DESIGN GUIDES
- ☐ TECHNICAL MANUAL
- ☐ ENGINEER MANUAL
- ☐ ENGINEER REGULATION
- ☐ OTHER
- ☒ MILITARY
- ☒ CIVIL WORKS

SUBJECT: Contractor Quality Control Personnel Requirement

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER
(See Sheet 2)

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWO-CD	Robert J. Vodicka, Acting Chief, Const. Div.
DATE 21 May 98	SIGNATURE Robert J. Vodicka

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT 21 MAY 98 *(Date)*

1b. TO:
Division Commander
U.S. Army Engineer Division,
CENWD-MR-ET-C
12565 West Center Road
Omaha NE 68144-3869

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER
Concur. Problem is valid.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWD-MR-ET	Eric Anthony Arndt, Construction Manager
DATE 26 Aug 98	SIGNATURE Eric Anthony Arndt

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE
Concur.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E.,C, ENGR AND CONST DIV.
DATE 6 Oct 98	SIGNATURE for Mohan

3. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District,

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

Paragraph 3.4.3. is edittable to require the personnel to be directly employed by the prime Contractor. When this is used the prime contractor is hiring the sub-contractor personnel for a couple of hours, defeating the objective of having independent quality control personnel.

2. RECOMMENDED SOLUTION:

Replace edittable text "shall be directly employed by the prime Contractor" with "shall be directly employed by the prime Contractor and may not be employed by a supplier or sub-contractor on this project".

NAME OF SUBMITTER *(Optional)*

WORK TELEPHONE NUMBER *(Optional)*

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

*(Submit a separate farm in **quadruplicate** for each report)*

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENWO-CD-QT, 25 August 1998

DOCUMENT NUMBER AND DATE: *CEGS-I 3202* dated May 1997

DOCUMENT TITLE: Fuel Storage Systems

DOCUMENT TYPE

- [ ] DRAWING ((STANDARD) (DEFINITIVE))
- [X] SPECIFICATION ((GUIDE) (STANDARD))
- [ ] DESIGN GUIDES
- [ ] TECHNICAL MANUAL
- [ ] ENGINEER MANUAL
- [ ] ENGINEER REGULATION
- [ ] OTHER

- [X] MILITARY
- [ ] CIVIL WORKS

SUBJECT: Holiday Testing of Coatings Applied to Underground Steel Storage Tanks

ROUTING (Check)

FROM: CENWO-CD-QT
District Commander
U.S. Army Engineer District,
215 North 17th Street
Omaha, NE 68102-4978

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL	NAME AND TITLE (Print or Type)
CENWO-CD for	ROBERT J. VODICKA, Acting Chief, Construction Division
DATE: 8-27-98	SIGNATURE: Robert J. Vodicka

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT: 28 Aug 98 (Date)

1b. TO: CENWD-MR-ET-C
Division Commander
U.S. Army Engineer Division,
12565 West Center Road
Omaha, NE 68144-3869

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

Recomend Approval

OFFICE SYMBOL	NAME AND TITLE (Print or Type)
CENWO-MR-ET-C	Eric Anthony Arndt Const. Program Manager
DATE: 10 Sept 1998	SIGNATURE: Eric Arndt

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314.1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur. Specification will be revised.

OFFICE SYMBOL	NAME AND TITLE (Print or Type)
CEMP-E	DWIGHT A. BERANEK, P.E., C, ENGR AND CONST DIV
DATE: 1/4/99	SIGNATURE

3. TO: CENWD-MR-ET-C
Division Commander
U.S. Army Engineer Division,
12565 West Center Road
Omaha, NE 68144-3869

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE (Print or Type)
DATE	SIGNATURE

4. RETURN TO: CENWO-CD-QT
District Commander
U.S. Army Engineer District,
215 North 17th Street
Omaha, NE 68102-4978

COPY FURNISHED

ENG FORM 3078, Mar 92 — EDITION OF OCT 88 IS OBSOLETE. — (Proponent: CEMP-EA)

1070

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENWO-CD-QT
25 August 1998

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

CEGS Section 13202, "Fuel Storage Systems", Paragraph 3.2.4.1 states "The required voltage for the holiday test shall be based on the coating thickness and NACE RP-0274. The holiday test voltage for FRP coated steel tanks shall be 35,000 volts." NACE RP-0274 is a high voltage test and states that this test does not apply to thin film coatings of less than 20 mils. STI-P3 coatings are generally 10 mils thick on the shell and 15 mils thick on the heads of the tank. The Steel Tank Institute (STI) and manufacturers of STI-P3 coatings recommend use of ASTM G62-87 Method A and not NACE RP-0274 for holiday test criteria on STI-P3 coatings because the voltage levels given in NACE RP-0274 are too high and are destructive to the coating. NACE RP-0274 and ASTM G62-87 Method B holiday test criteria are identical for coatings over 40 mils thick. Both standards could be used for holiday test criteria for the 60 mils thick Fiberglass Reinforced Plastic (FRP) coated tanks.

2. RECOMMENDED SOLUTION:

Revise CEGS 13202," Fuel Storage Systems" Paragraph 3.2.4.1 to require holiday testing in accordance with the appropriate standard; use ASTM G62-87 Method A for STI-P3 coatings and use ASTM G62-87 Method B and NACE RP-0274 for Fiberglass Reinforced Plastic (FRP) coatings. Delete second and third sentences of CEGS 13202 Paragraph 3.2.4.1 and in their place add:

"The required voltage for the holiday test of STI-P3 coatings shall be based on the coating thickness and ASTM G62-87 Method A. The required voltage for the holiday test of FRP coatings shall be based on the coating thickness, ASTM G62-87 Method B, and NACE RP-0274."

2. Revise CEGS Section 13202, "Fuel Storage Systems" Paragraph 1.1, References to add the following standard:

"ASTM G 62-87 Standard Test Methods For Holiday Detection in Pipeline Coatings"

NAME OF SUBMITTER *(Optional)*	WORK TELEPHONE NUMBER *(Optional)*
David L. Burbeck	(402) 221-4185

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENWO-CD-EA, 22 September 1998

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 15400 (08/94)	Plumbing, General Purpose

DOCUMENT TYPE

- ☐ DRAWING ((STANDARD) (DEFINITIVE))
- ☒ SPECIFICATION ((GUIDE) (STANDARD))
- ☐ DESIGN GUIDES
- ☐ TECHNICAL MANUAL
- ☐ ENGINEER MANUAL
- ☐ ENGINEER REGULATION
- ☐ OTHER
- ☒ MILITARY
- ☒ CIVIL WORKS

SUBJECT: EMERGENCY SHOWER

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWO-CD	Robert J. Vodicka, Acting Chief, Const. Div.
DATE 9.14.98	SIGNATURE

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT 24 SEP 98 *(Date)*

1b. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

See attached comments.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWD-MR-ET-E	JAMES E. CREWS, P.E., Dir, Engrg & Tech
DATE 29 SEP 98	SIGNATURE

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur. Specification will be revised.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E.,C, ENGR AND CONST DIV.
DATE 4/4/99	SIGNATURE

3. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District,

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENWO-CD-BA
22 SEPTEMBER 1998

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

IN RECENT DAYS I HAVE HAD TWO PROTRACTED DISCUSSIONS WITH THE CONTRACTOR ET. AL. ABOUT THE SPECIFICATION FOR SAFETY SHOWER. THE SPECIFICATION (SECTION 15400, PARAGRAPH 3.10) SAYS IT SHALL BE MADE OF "CORROSION RESISTING STEEL". THIS IS NOT THE FIRST TIME THIS AURGUMENT HAS BEEN RAISED. IT WILL CONTINUE TO BE RAISED UNTIL THE SPECIFICATION IS MADE CLEAR. WE HAVE FOUGHT THIS BATTLE IN THE PAST MANY TIMES. THE INTERPRETATION IS THAT CORROSION RESISTING STEEL MEANS STAINLESS. OUR LAWERS HAVE BACKED THAT UP. THE CONTRACTORS READ THOSE WORDS AND THINK, NOT WITHOUT REASON, THAT THE AUTHOR WANTS GALVANIZED. SO WE ARGUE AND SOMETIMES FIGHT ABOUT IT. THE FACT THAT WE ALWAYS WIN DOESN'T MEAN WE HAVE A GOOD SPECIFICATION. WHAT MATTERS IS THAT WE ARE WASTING ENERGY NEEDLESSLY FIGHTING. IF WE WANT STAINLESS STEEL, WHY CAN'T WE JUST SAY SO ??????? THERE IS NOTHING PROPRIETARY ABOUT THE WORD STAINLESS. EVERYONE MAKES IT PER ASTM RECIPES. AND ITS NOT JUST A SAFETY SHOWER THIS HAPPENS ON SEVERAL OTHER ITEMS TOO. ONE DAY SOME INVENTIVE GENIOUS WILL MAKE SOMETHING LIKE THIS OUT OF COR-TEN AND THEN THE SHOE WILL BE ON THE OTHER FOOT. IT WON'TBE WHAT WE WANT AT ALL; BUT IT WILL MEET THE SPECIFICATION.

2. RECOMMENDED SOLUTION:

REPLACE THE WORDS "CORROSION RESISTING STEEL" WITH "STAINLESS STEEL" IN PARAGRAGH 3.10.

NAME OF SUBMITTER *(Optional)*	WORK TELEPHONE NUMBER *(Optional)*
DOUGLASS H ALLEN	(608) 275-7828

5

CEGS 15400, paragraph 3.10
Subject: Stainless Steel Terminology

The term Corrosion Resistant Steel (CRES) was often used on the Corps of Engineers drawings when we were building some of the major dams in the 1950's. Since that time, the term "stainless steel" has become more popular and the term CRES is seldom used in commercial construction. For instance, the ASTM's that we use to specify our piping only use the term "stainless steel", and the steel metals used to fabricate components are called stainless steels, not CRES. The library did a search of the ASTM Title Index and a search of Industry Standard Index, and got no "hits." If an 8A or novice contractor tried to search for a CRES product, he would likely conclude that there are none made. It appears that the term "corrosion resistant steel" or CRES is no longer a meaningful term in commercial construction.

Recommend that we accept and adopt the 3078 as written with one addition. The addition is to search the CEGS Data Base for the term "CRES" or "corrosion resistant steel" and change it to "stainless steel."

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENAB-CO-SQ, 20 FEB 98

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS-05120, April 1989	Structural Steel

DOCUMENT TYPE

- ☐ DRAWING ((STANDARD) (DEFINITIVE))
- ☒ SPECIFICATION ((GUIDE) (STANDARD))
- ☐ DESIGN GUIDES
- ☐ TECHNICAL MANUAL
- ☐ ENGINEER MANUAL
- ☐ ENGINEER REGULATION
- ☐ OTHER
- ☐ MILITARY
- ☐ CIVIL WORKS

SUBJECT

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District

ACTION RECOMMENDED BY DISTRICT COMMANDER *(See Sheet 2)*

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAB-CO	JEFFREY J. WEBER, P.E. Acting Chief, Construction Division
DATE: 23 FEB 98	SIGNATURE

☐ 1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT: 25 February 1998 (Date)

☐ 1b. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

☐ 2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE: Concur.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-ET	DWIGHT A. BERANEK, P.E., CHIEF, ENG & CONST. DIV.
DATE: 2 Dec 98	SIGNATURE

☐ 3. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

☐ 4. RETURN TO:
District Commander
U.S. Army Engineer District

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*		Sheet 2 of 3
Subject: CEGS-05120, STRUCTURAL STEEL, Para. 1.3	CENAB-CO-SQ	20 FEB 98

PROBLEM:

Unsafe erection practices by contractors.

Baltimore District has had two truss collapses since September of 1996, both caused by erectors who did not provide adequate temporary bracing for trusses during erection. These were the Mologne Guest House, WRAMC, DC, in September of 1996 and the Company Operations Facility(COF) building of the Unaccompanied Enlisted Personnel Housing(UEPH) project, Ft. Detrick, MD, in August 1997. Several workers were injured.

Poor erection practices with respect to steel frames have also been found to frequently occur. Many contractors and erectors have the misconception that steel columns can be allowed to be freestanding during erection in all cases. In general, steel columns are not designed to be freestanding. Column base plate connections to footings are generally designed for bearing and shear, not moment resistance. The column footing is also generally not designed for overturning resistance.

Also, cable X-bracing is not consistently provided by the erectors. Erectors often provide only a diagonal cable (not an X) in a frame and often do not provide cables in each frame or in each direction.

Currently the Structural Steel specification (05120), para. 1.3, requires the following:
"Erection plan of the structural steel framing is required. Erection plan shall conform to the requirements of AISC S303, shall be submitted prior to erection, and shall describe all necessary temporary supports, including the sequence of installation and removal."

The AISC S303 code is the "AISC Code of Standard Practice for Steel Buildings and Bridges" and states that the erector is responsible for determining the necessary temporary supports but does not require the erector to have any particular qualifications for doing this. The experience of the erector is relied upon. However, what worked for the last job may not work for the next job, as evidenced by the truss collapses mentioned above.

Also, erectors are often willing to take the risk of the column or frame falling in order to avoid what they often feel is unnecessary work of guying or cable bracing. The contractor's risk is the government's risk and it is a risk that should not be taken.

RECOMMENDED SOLUTION:

For low-rise structural steel buildings, (a majority of our military work), require the designer to design the structure to be erected in accordance with AISC Design Guide #10, "Erection Bracing of Low-Rise Structural Steel Buildings", and require the contractor to erect in accordance with this manual. If the building is a non-low-rise structural steel buildings or if it is a structure that has complex erection requirements, have the guide specification require the contractor to submit an erection plan that has been reviewed, stamped and sealed by a structural engineer with a Professional Engineering license.

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*		Sheet 3 of 3
Subject: CEGS-05120, STRUCTURAL STEEL, Para. 1.3	CENAB-CO-SQ	20 FEB 98

Revise guide specification para. 1.3, Submittals, as follows:

Erection; [___]

****

NOTE 1: For low-rise structural steel buildings (60 feet tall or less and a maximum of 2 stories) the designer *shall design the structure to be erected in accordance with AISC Design Guide #10, "Erection Bracing of Low-Rise Structural Steel Buildings"*, and edit the paragraph below to require the contractor to erect in accordance with this manual.
NOTE 2: If the building is a non-low-rise structural steel buildings or if it is a structure that has complex erection requirements, edit the paragraph below to require the contractor to submit an erection plan that has been reviewed, stamped and sealed by a structural engineer with a Professional Engineering license.
****

"Erection plan of the structural steel framing is required. Erection plan shall conform to the requirements of AISC S303 [and AISC Design Guide #10, "Erection Bracing of Low-Rise Structural Steel Buildings"], shall be submitted prior to erection, and shall describe all necessary temporary supports, including the sequence of installation and removal. [Erection plan shall be reviewed, stamped and sealed by a structural engineer with a Professional Engineering license issued by the state in which the project is located.]"

The cost of a review by a licensed engineer is minimal and is warranted for non-low rise steel buildings, or structures with complex erection requirements. The erectors judgment should not be solely relied upon for this life-safety issue. An engineer can make an analytical determination of adequacy of an erection plan, an erector generally cannot. The above mentioned collapses would not have occurred if flaws in the erection plan were found through a review by a *professional engineer.*

Requiring the steel to be designed for erection by the AISC Design Guide #10 will not be a major effort for the designer. The designer need only check his design against the prescriptive requirements listed in the manual and increase sizes of elements accordingly. Also, use of the manual will take the guess-work out of erection for the contractor and improve safety. Cable bracing procedures will be specified.

In addition to changing the guide specification, designing for erection by this manual must be made a Corps-wide design requirement. The new requirements should be implemented by sending out an ETL and a Construction Bulletin on the subject and inserting the requirement in the AEI to inform all those involved.

SUBMITTER: William T. Hamel, Structural Engineer, CENAB-CO-SQ
WORK TELEPHONE: (410)962-4884

6

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CEMP-EC, 6 NOV 98

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 15400	PLUMBING GENERAL

DOCUMENT TYPE

- ☐ DRAWING ((STANDARD) (DEFINITIVE))
- ☒ SPECIFICATION ((GUIDE) (STANDARD))
- ☐ DESIGN GUIDES
- ☐ TECHNICAL MANUAL
- ☐ ENGINEER MANUAL
- ☐ ENGINEER REGULATION
- ☐ OTHER

- ☒ MILITARY
- ☐ CIVIL WORKS

SUBJECT: CORROSION PROTECTION FOR DISSIMILAR PIPE MATERIALS

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-EC	GARY G. BAUER MECHANICAL ENGINEER
DATE: 6 Nov 1998	SIGNATURE: Gary G. Bauer

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ *(Date)*

1b. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

Concur.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-EC	ROBERT CHESI TEAM LEADER
DATE: 6 Nov 1998	SIGNATURE: Robert W Chesi

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur. Specification will be revised.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E.,C, ENGR AND CONST DIV.
DATE: 1/21/99	SIGNATURE: DAB

3. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District,

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CEMP-EC
6 NOV 98

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

Reference CEGS 15400 paragraph 3.1.4 which states "Connections between ferrous and non-ferrous copper pipe shall be made with dielectric unions or flange waterways." Frequently this statement is interpreted to include the connection between a fixture trap and waste system riser. I do not feel the intent is to install a dielectric union at the connection between the trap and cast iron riser.

2. RECOMMENDED SOLUTION:

To help clarify the intent of paragraph 3.1.4 add the word water between copper and pipe, i.e. "Connections between ferrous and non-ferrous copper *water pipe shall be made with dielectric unions or flange waterways."*

NAME OF SUBMITTER *(Optional)*	WORK TELEPHONE NUMBER *(Optional)*
Gary G. Bauer	(202) 761-0205

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENWD-MR-ET-E, 27 January 1999

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 08700, MARCH 96	08700 -- Builders' Hardware

DOCUMENT TYPE

- [ ] DRAWING ((STANDARD) (DEFINITIVE))
- [x] SPECIFICATION ((GUIDE) (STANDARD))
- [ ] DESIGN GUIDES
- [ ] TECHNICAL MANUAL
- [ ] ENGINEER MANUAL
- [ ] ENGINEER REGULATION
- [ ] OTHER

- [x] MILITARY
- [ ] CIVIL WORKS

SUBJECT: Update of padlock specification

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER
(See Sheet 2)

OFFICE SYMBOL | NAME AND TITLE *(Print or Type)*
DATE | SIGNATURE

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ *(Date)*

1b. TO:
Division Commander
U.S. Army Engineer Division,
CENWD-MR-ET-C
12565 West Center Rd
Omaha NE 68144-3869

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWD-ET	for James E. Crews, PE, Director Engineering and Tech Services
DATE: 1-29-99	SIGNATURE: Del Raj Sogal

2. TO:
HQUSACE (CEMP-XX) ET
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE
Concur. Recommendation will be incorporated essentially as described.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E.,C,Engr and Const Div
DATE: 12 Feb 99	SIGNATURE: for Omata Lee

3. TO: Attn CENWD-MR-ET-C
Division Commander
U.S. Army Engineer Division,
12565 West Center Rd
Omaha NE 68144-3869

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL | NAME AND TITLE *(Print or Type)*
DATE | SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District,

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENWD-MR-ET-E
27 January 1999

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

Spec section Spec 08700 Builders Hardware
Paragraph 2.4.7 Padlocks does not provide guidance to the designer to select the grade or options of padlocks required.

2. RECOMMENDED SOLUTION:

DELETE:

****

NOTE Select grade of padlock from performance levels and options from ASTM F 883 to match specific security requirements.

****

Padlocks shall conform to ASTM F 883. Straps, tee hinges, and hasps shall conform to BHMA ANSI/ BHMA A 156.20.

SUBSTITUTE:

Padlock shall conform to ASTM F 883, Type [PO1] [____], Option[s] [A, B, and G] [___] [and] [____], Grade [6] [___]. [All padlocks shall be keyed alike.] [All padlocks shall be keyed into masterkey system.] Straps, tee hinges, and hasps shall conform to BHMA ANSI/ BHMA A 156.20.

****

NOTE: Type P01 is key operated, Grade 6 is the top grade commercial lock, Option A-- key is captive in cylinder when padlock is unlocked, Option B-- removable cylinder, Option G-Environmental resistant. For combination locks or other options and grades see the ASTM.

****

NAME OF SUBMITTER *(Optional)*	WORK TELEPHONE NUMBER *(Optional)*
Steven P. Rumbaugh	(402) 697-2645

1080

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENWO-CD-QT, 4 DEC 1998

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 02821 (09/98)	02821 - Fencing

DOCUMENT TYPE

- [ ] DRAWING ((STANDARD) (DEFINITIVE))
- [x] SPECIFICATION ((GUIDE) (STANDARD))
- [ ] DESIGN GUIDES
- [ ] TECHNICAL MANUAL
- [ ] ENGINEER MANUAL
- [ ] ENGINEER REGULATION
- [ ] OTHER

- [x] MILITARY
- [x] CIVIL WORKS

SUBJECT: Update of padlock specifications.

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER *(See Sheet 2)*

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWO-CD	Robert J. Vodicka, Acting Chief, Const. Div.
DATE 12.9.98	SIGNATURE

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT: 9 Dec 98 *(Date)*

1b. TO:
Division Commander
U.S. Army Engineer Division,
ATTN: CENWD-MR-ET-C
12565 West Center Rd.
Omaha,NE 68144

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER: Concur, please see CENWO-MR-ET-E addendum attached

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENWO-ET	James E. Crews, PE, Director Engineering + Tech Services
DATE 1-29-99	SIGNATURE

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE: Concur

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-ET	Dwight Beranek, P.E., C, Engr. & Const. Div., D/MP
DATE 9 Feb 99	SIGNATURE

3. TO:
Division Commander
U.S. Army Engineer Division,
ATTN: CENWD-MR-ET-C
12565 West Center Rd.
Omaha, NE 68144

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District,
ATTN: CENWO-CD-QT
215 No. 175th St.
Omaha, NE 68102-4978

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENWO-CD-QT
04 DEC 1998

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

Spec. section 02821, paragraph 2.9 allows the designer to choose a padlock type [EPB]. EPB is not a type that is listed in the relevant reference ASTM F 833 (1990 Padlocks).

2. RECOMMENDED SOLUTION:

Remove the [EPB].

NAME OF SUBMITTER *(Optional)*

WORK TELEPHONE NUMBER *(Optional)*

COMMENT: The 3078 cites a problem, but I feel it does not go far enough. Most people editing the spec are not familiar with padlocks. After discussion with the originator of the idea for the 3078, I recommend adding a type, grade and options while allowing the designer to change those if needed. Therefore change the 3078 to the following:

1. PROBLEM:

Spec section CEGS 02821 FENCING, paragraph 2.9 PADLOCKS, does not allow the designer to indicate the grade or options of padlocks required.

2. RECOMMENDED SOLUTION

DELETE:

ASTM F 883, Type [P01, Grade 2] [EPB], Size 44 mm (1-3/4 inch). 1-3/4 inch. Padlocks shall be keyed alike and each lock shall be furnished with two keys.

SUBSTITUTE:

Padlocks shall conform to ASTM F 883, Type [PO1] [_____], Option[s] [A, B, and G] [____] [and] [_____], Grade [6] [____]. [All padlocks shall be keyed alike.] [All padlocks shall be keyed into masterkey system, see 08700 Builders Hardware.]

NOTE: Type P01 is key operated, Grade 6 is the top grade commercial lock, Option A-- key is captive in cylinder when padlock is unlocked, Option B-- removable cylinder, Option G—Environmental resistant. For combination locks or other options and grades see the ASTM.

****

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CESWF-EC-CS, 20 January 1999

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS-01330 (Sep 1997)	SUBMITTAL PROCEDURES

DOCUMENT TYPE

[ ] DRAWING (STANDARD)(DEFINITIVE) [X] SPECIFICATION (GUIDE) (STANDARD)

[ ] DESIGN GUIDES [ ] TECHNICAL MANUAL

[ ] ENGINEER MANUAL [ ] ENGINEER REGULATION [ ] OTHER

[X] MILITARY

[ ] CIVIL WORKS

SUBJECT: Submittal Register Diskette

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,
ATTN: CESWF-EC-C
Fort Worth, TX 76102-0300

ACTION RECOMMENDED BY DISTRICT COMMANDER *(See Sheet 2)*

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CESWF-EC	for Darrell R Stevens LARRY O. ROGERS, P.E., Chief, Engineering & Construction Div
DATE	SIGNATURE

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT 20 January 1999 *(Date)*

1b. TO:
Division Commander
U.S. Army Engineer Division,
ATTN: CESWD-ET
Dallas, TX 75242-0216

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

Concur and recommend approval.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CESWD-ED	HARLAN E. KARBS, P.E. Chief, Engineering & Construction Division
DATE 2/11/99	SIGNATURE Harlan E Karbs

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

Concur.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E.,C, ENGR AND CONST DIV.
DATE 23 Feb 99	SIGNATURE for Dwight A. Beranek

3. TO:
Division Commander
U.S. Army Engineer Division,
ATTN: CESWD-ET
Dallas, TX 75242-0216

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

OFFICE SYMBOL CESWD-ED	NAME AND TITLE *(Print or Type)*
DATE	SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District
ATTN: CESWF-EC-C
Fort Worth, TX 76102-0300

COPY FURNISHED

ENG FORM 3078, Mar 92 EDITION OF OCT 88 IS OBSOLETE (Proponent, CEMP-EA)

1085

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)	OFFICE SYMBOL AND DATE CESWF-EC-CS

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary)*

1. PROBLEM:

Paragraph 3.2 SUBMITTAL REGISTER (ENG FORM 4288), second sentence, states that the electronic submittal register will be furnished on a diskette. For electronic solicitations, the Fort Worth District is putting the submittal register files on the solicitation and award CD-ROM disks in lieu of furnishing a separate 3-1/2" floppy diskette.

2. RECOMMEND SOLUTION:

Change the second sentence ("The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette.") to read as follows:

"The Contractor will also be given the submittal register files, containing the computerized ENG Form 4288 and instructions on the use of these files. These submittal register files will be furnished on [the Award CD-ROM disk][a separate diskette]."

NAME OF SUBMITTER (Optional)	WORK TELEPHONE NUMBER *(Optional)*
Terry W. Vitt	(817) 978-2294, Ext. 1913

1085

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENAB-EN-DM, 8 February 1999

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 15950, 15951	15950 - Heating, Ventilating and Air Conditioning (HVAC) Control Systems; 15951 - Direct Digital Control for HVAC

DOCUMENT TYPE

- ☐ DRAWING ((STANDARD) (DEFINITIVE))
- ☒ SPECIFICATION ((GUIDE) (STANDARD))
- ☐ DESIGN GUIDES
- ☐ TECHNICAL MANUAL
- ☐ ENGINEER MANUAL
- ☐ ENGINEER REGULATION
- ☐ OTHER

- ☒ MILITARY
- ☒ CIVIL WORKS

SUBJECT: COMBINATION THERMOSTATS FOR FAN COIL UNITS

ROUTING *(Check)*

FROM: District Commander, U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER *(See Sheet 2)*

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAB-EN	Stanislaw P. Gembicki Jr., P.E. Chief, Engineering Division
DATE: 16 Feb 99	SIGNATURE: Stanislaw P. Gembicki Jr.

☐ 1a. TO: HQUSACE (CEMP-EA), WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ *(Date)*

☐ 1b. TO: Division Commander, U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER: Concur with District's recommendation.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAD-ET-E	JOHN J. KERKOWSKI, JR., P.E. Chief, Engineering Division
DATE: 26 Feb 1999	SIGNATURE: John J. Kerkowski Jr.

☐ 2. TO: HQUSACE (CEMP-EA), WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE: See attached sheet.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E. Chief, Engineering & Construction Divisions
DATE: 11 Mar 99	SIGNATURE: D. Beranek

☐ 3. TO: Division Commander, U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAD-ET-E	JOHN J. KERKOWSKI, JR., P.E. Chief, Engineering Division
DATE	SIGNATURE

☐ 4. RETURN TO: District Commander, U.S. Army Engineer District,

COPY FURNISHED

The desirability and customer preferences for the use of microprocessor based thermostats on fan coil unit systems will be investigate and appropriate revisions made to CEGS 15950, CEGS 15951, and TI 810-11.

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENAB-EN-DM

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

The guide specification sections (15950 and 15951) requirements for the combination heating-cooling thermostats used in fan coil applications can not be fully met. Specifications are base on old technology and should be updated.
Also, the diagrams for dual-temperature fan coil-unit temperature control system given in TM-815-3 do not correspond with the requirements in Specification Sections 15950 paragraph 2.9.7.3 and 15951, paragraph 2.9.7.3. For example, figure 4-5 does not show thermostat heating and cooling circuits to be electrically isloated from each other as specified.
As a result, the guide specifications should be modified in order to prevent delays and extra cost incurred by the Government during construction, and at the same time obtain a higher quality up-to-date system. The directions and standard diagrams given in TM-815-3 should also be changed so that they correspond with the modifications to the guide specifications.

2. RECOMMENDED SOLUTION:

Modify Specification Sections 15950, and 15951, paragraph 2.9.7.3 as necessary to allow the installation of thermostats that meet the specifications. Thermostats should be specified as microprocessor-based, fully programmable, with the capability to provide automatic summer-winter changeover and to lock out heating and cooling temperatures, and to provide a deadband with no heating or cooling when the space temparatue is between the cooling and heating setpoints. The suggested new paragraph 2.9.7.3 for sections 15950 and 15951 is included below.
Also, modify TM-815-3, paragraph 4-8 and Figure 4-5 for Dual-Temperature Fan Coil-Unit Control System so that these reflect the changes made to the fan-coil themostat specifications.

2.9.7.3 Combination Thermostat

Microprocessor-based thermostats shall have built-in keypads for scheduling of day and night temperature settings. Access to the scheduling mode shall be by a password control code. When out of the scheduling mode, thermostats shall have continuous display of time, with AM and PM indicator, continuous display of day of week, and either continuous display of room temperature with display of temperature setpoint on demand, or continuous display of temperature setpoint with display of room temperature on demand. In the programmable mode, the display shall be used for interrogating time program ON-OFF setpoints for all seven days of the week. The time program shall allow two separate temperature setback intervals per day. The thermostats shall have a means for temporary and manual override of the program schedule, with automatic program restoration on the following day. Thermostats shall have a replaceable battery to maintain the timing for one year in the event of a power outage. All scheduling shall be provided in non-volatile memory. Maximum differential shall be 1 degree C. 2 degrees F. When used for heat pump applications, the thermostat shall have an emergency heat switch. Program capabilities shall include but not be limited to automatic summer-winter changeover for thermostats by sensing the supplied fluid temperature. Cooling shall be controlled when temperature is above the upper setpoint and heating when temperature is below the lower setpoint. Programmable deadband shall be capable of locking out heating and cooling when temperature is between the setpoints.

NAME OF SUBMITTER *(Optional)*
Nestor Rivera NRivera 8 Feb 95

WORK TELEPHONE NUMBER *(Optional)*
(410) 962-6698

1086

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENAB-EN-DM, 10 February 1998

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
Drawing Set 721-10-02, 21 January 1994	Department of the Army, Facilities Standardization Program Standard, Unaccompanied Enlisted Personnel Housing

DOCUMENT TYPE

- [X] DRAWING ((STANDARD) (DEFINITIVE))
- [ ] SPECIFICATION ((GUIDE) (STANDARD))
- [ ] DESIGN GUIDES
- [ ] TECHNICAL MANUAL
- [ ] ENGINEER MANUAL
- [ ] ENGINEER REGULATION
- [ ] OTHER

- [X] MILITARY
- [ ] CIVIL WORKS

SUBJECT: UNACCOMPANIED ENLISTED PERSONNEL HOUSING (UEPH) STANDARD DESIGN SPACE ALLOCATION FOR MECHANICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS.

ROUTING *(Check)*

FROM: District Commander, U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER: *(See Sheet 2)*

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAB-EN	Stanislaw P. Gembicki Jr., P.E. Chief, Engineering Division
DATE: 14 Feb 99	SIGNATURE: Stanislaw P. Gembicki Jr.

1a. TO: HQUSACE (CEMP-EA), WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ *(Date)*

1b. TO: Division Commander, U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER: Concur with District's recommendation except that 48" clear between the top of the ceiling grid and the nearest overhead structural appears excessive and not cost effective.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAD-ET-E	JOHN J. KERKOWSKI, JR., P.E. Chief, Engineering Division
DATE: 23 Feb 1999	SIGNATURE: John J. Kerkowski Jr.

2. TO: HQUSACE (CEMP-EA), WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE: See attached sheet.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E. Chief, Engineering & Construction Division
DATE: 1 Mar 99	SIGNATURE: Dwight A. Beranek

3. TO: Division Commander, U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAD-ET-E	JOHN J. KERKOWSKI, JR., P.E. Chief, Engineering Division
DATE	SIGNATURE

4. RETURN TO: District Commander, U.S. Army Engineer District,

COPY FURNISHED

Concur that adequate mechanical room and ceiling space must be provided for the installation and maintenance of heating/cooling, domestic hot water, fire protection and plumbing equipment. Savannah District, the Center of Standardization for HEPH, is being tasked to evaluate and recommend revisions do the standard design.

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENAB-EN-DM

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

The criteria for theUnaccompanied Enlisted Personel Housing projects space allocation is principally given by the Facilities Standardization Program Standard. Lessons learned have revealed that the most serious problem experienced with recent barracks design is the lack of ceiling space to expedite the requirements in the specification. There is a requirement to provide secondary drain pans beneath all of the ceiling fan coil units to prevent any possible dripping of condensate upon the ceiling tiles beneath. The elevation dimensions indicated in the current design guide fail to consider the need for ceiling space and must be revised to properly install the equipment, supports, ductwork, piping, etc., and provide access for operation and maintenance above ceiling.
Also, based on the information contained in TM 5-810-5, Plumbing and ETL 1110-3-489, 3 Apr 1998, Engineering and Design/ Domestic Water Heaters for Barracks, the mechanical room space must be enlarged in order to accommodate larger domestic hot water generation equipment including hot water storage. At the same time, the headroom requirement in the building mechanical rooms must have enough space to allow installation of verticaldomestic hot water storage tanks. It should be noted that in accordance with The Secretary of Defense Letter dated 6 Nov 1995, Subject: "Design and Construction of UEPH," an additional 4 square meters per module is authorized to be added to the floor plan of the building to accommodate site-specific requirements such as mechanical systems.

2. RECOMMENDED SOLUTION:

The standard design promulgated by Huntsville must be changed to provide other standard designs for use in northern states. The new standard design should consider the type of heating/cooling systems required including the space necessary to accommodate the mechanical equipment which normally is of larger sizes or not required for the geographical areas on which the standard design was based. The ceiling height above all of the living spaces must be no less than 48 inches clear between the top of the ceiling grid and the nearest overhead structural framing toprovide space for operation and maintenance accessibility. After deciding on the equipment necessary for the central domestic hot water systems, we request the extra space provided in the Soldier Community Building mechanical room to be 550 square feet for the hot water generation equipment, and 1000 square feet per facility to accommodate the Mechanical, Electrical, Fire Protection, and Plumbing systems (total extra space required is 1550 square feet). The headroom requirement in the building mechanical rooms must be no less than 10 feet clear above the walking surface.

NAME OF SUBMITTER *(Optional)*
Manny Diaz, P.E.

WORK TELEPHONE NUMBER *(Optional)*
(410) 962-3902

1087

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE: CENAB-EN-DM

DOCUMENT NUMBER AND DATE	DOCUMENT TITLE
CEGS 15951	Direct Digital Control for HVAC

DOCUMENT TYPE

- ☐ DRAWING ((STANDARD) (DEFINITIVE))
- ☒ SPECIFICATION ((GUIDE) (STANDARD))
- ☐ DESIGN GUIDES
- ☐ TECHNICAL MANUAL
- ☐ ENGINEER MANUAL
- ☐ ENGINEER REGULATION
- ☐ OTHER

- ☒ MILITARY
- ☒ CIVIL WORKS

SUBJECT: SWITCH AND THEMOSTAT WALL MOUNTING HEIGHTS FOR ADA COMPLIANT FACILITIES

ROUTING *(Check)*

FROM:
District Commander
U.S. Army Engineer District,

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAB-EN	Stanislaw P. Gembicki Jr., P.E. Chief, Engineering Division
DATE: 16 Feb 99	SIGNATURE: Stanislaw P. Gembicki Jr.

☐ 1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ *(Date)*

☐ 1b. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER
Concur with District's recommendation

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAD-ET-E	JOHN J. KERKOWSKI, JR., P.E. Chief, Engineering Division
DATE: 22 Feb 1999	SIGNATURE: John J. Kerkowski Jr.

☐ 2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE
See attached sheet.

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CEMP-E	DWIGHT A. BERANEK, P.E. Chief, Engineering and Construction Division
DATE: 3/11/99	SIGNATURE: Dwight A. Beranek

☐ 3. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL	NAME AND TITLE *(Print or Type)*
CENAD-ET-E	JOHN J. KERKOWSKI, JR., P.E. Chief, Engineering Division
DATE	SIGNATURE

☐ 4. RETURN TO:
District Commander
U.S. Army Engineer District,

COPY FURNISHED

Concur that clarification is needed in specifying mounting height for wall mounted thermostats and similar control devices in ADA compliant facilities and spaces. This is applicable to both CEGS 15950 and CEGS 15951. In CEGS 15950 and CEGS 15951 add a note for paragraph 3.2.3 that reads:

"NOTE: Wall mounted thermostats and similar control system components accessible to the occupants in ADA compliant facilities and spaces shall be mounted 1.2 meters - 48 inches - above the floor for forward reach and 1.3 meters - 54 inches - for side reach. The mounting height and location for these system components shall be noted on the drawings or the following paragraph revised accordingly"

Revise paragraph 3.2.3 in CEGS 15950 and 15951 to read:

"Room instruments such as wall mounted thermostats shall be mounted 1.5 meters - 60 inches - above the floor unless otherwise noted. Temperature setpoint devices shall be recess mounted."

In CEGS 15951 paragraph 2.9.7 revise the first sentence to read:

"Fan-coil unit thermostats in personnel living spaces shall be of the low voltage type with locking covers."

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS *(Cont'd)*

OFFICE SYMBOL AND DATE
CENAB-EN-DM

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

The guide specification section 15951, paragraph 2.9.7 requires that the thermostats used in fan coil applications "be wall mounted not less than 1.5 meters 60 inches above the floor, unless otherwise shown."
According to ADA regulations, in ADA compliant facilities, the thermostat mounting heights for forward reach and side reach should be 48 and 54 inches high maximum respectively instead of the specified 60 inch height.

As a result,the guide specifications should be modified in order to prevent delays and extra cost incurred by the Government during construction due to field changes and to ensure ADA compliance where neccessary.

2. RECOMMENDED SOLUTION:

Provide a note to the designer indicating ADA requirements for switch and thermostat wall mounting heights in ADA compiant facilities.

NAME OF SUBMITTER *(Optional)*
Nestor Rivera
8 Feb 99

WORK TELEPHONE NUMBER *(Optional)*
(410) 962-6698

1C88

Data Format Page

Recommended Changes to Engineering Documents Data	
Identification No.	17
Name	Carlton A. Wright
Job Title	Architect
Organization	USACESAS-CD-QT
Telephone	912 652-5247
E-mail Add	Carlton.A.Wright@SAS02.usace.army.mil
Document No	CEGS 09250
Document Title	GYPSUM WALLBOARD
Subject	CEMENTITIOUS BACKER UNITS
Problem	Incorrect installation of cementitious backer units used as substrates for placement of ceramic tile. Current guide specification for this product occurs in CEGS 09310 Ceramic Tile with minor reference made in the more logical CEGS 09250 Gypsum Wallboard. Installation errors occur because gypsum wallboard/metal stud installers also install cementitious backer units using the same metal stud and fastening specifications used for gypsum wallboard. The ceramic tile installer, on the other hand, generally does not install the cementitious units which are usually already in place at the start of tile work. Most common errors are; gage and spacing of metal studs and using the wrong type fasteners. It is interesting to note that the Navy guide specifications also place cementitious baker units in the gypsum wallboard section rather than the ceramic tile section.
Solution	Delete references to cementitious backer units in CEGS 09310 Ceramic Tile as follows: Under par. 1.1 References, delete ANSI A109.11 Interior Installation of Cementitious Backup Units and ANSI A118.9 Test Methods and Specifications for Cementitious Backup Units. Delete paras. 2.4.8 Cementitious Backer Board and 3.4.7 Cementitious Backer Board. These two paragraphs should also be deleted from the Section Table of Contents. ADD THE FOLLOW TO CEGS 09250 GYPSUM WALLBOARD: Section Table of Contents; Add par. 2.7 Cementitious Backer Units and par. 3.7 Application of Cementitious Backer Units. Change paragraph numbers for Fire-resistant Assemblies and Patching to 3.8 and 3.9 respectively. Change the first sentence in Note, page 3 to read; This specification covers the requirements for gypsum board, including regular, foil backed, fire-resistant, water-resistant and cementitious backer units. Under Part 1 General, par. 1.1 References, add; AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ANSI A108.11 (1992) Interior Installation of

	Cementitious Backer Units ANSI A118.9 (1992) Test Methods and Specifications for Cementitious Backer Units Add Cementitious Backer Units in par. 1.3 Submittals under SD-13 Certificates. Add par. 2.7 CEMENTITIOUS BACKER UNITS Cementitious backer units shall comply with ANSI A118.9 Add par. 3.7 APPLICATION OF CEMENTITIOUS BACKER UNITS Cementitious backer units shall be installed in accordance with ANSI A108.11. Fasteners shall be the type designed for cement board application. Change paragraph numbers for Fire-resistant Assemblies and Patching to 3.8 and 3.9 respectively
E-mail Address of Su	stuart.clifton@sas02.usace.army.mil
E-mail Address of Engineering Chief or Construction Chief	homer.g.mcbrayer@sas02.usace.army.mil
E-mail Adress of Director of Engineering & Technical Services	Carl Postlewate SAD@CESAS
Date	1998-11-19 00:00:00

12 February 1999 - Concur - Frank Norcross, HQUSACE (CEMP-ET)

Data Format Page

Recommended Changes to Engineering Documents Data	
Identification No.	25
Name	Richard L Nichols E.I.T
Job Title	Mechanical Engineer
Organization	Louisville District USACE
Telephone	(502)582-5656
E-mail Add	richard.l.nichols@lrl02.usace.army.mil
Document No	CEGS-15653
Document Title	AIR-CONDITIONING SYSTEM (UNITARY TYPE)
Subject	REMOTE CONDENSER OR CONDENSING UNIT
Problem	Paragraph 2.10.1, Air-Cooled Condenser, a subparagaph to 2.10 REMOTE CONDENSER OR CONDENSING UNIT, states units shall be rated in accordance with ARI 460. Paragraph 2.10.1.1, Connections, gives the appearance the preceding paragraphs apply to both condensers and condensing units. ARI 460 is applicable only to air cooled condensers, not condensing units.
Solution	Offer a choice in paragraph 2.10.1 for the appropriate rating standard for condensers or condensing units. Brief research seems to indicate ARI 500 is the applicable standard for condensing units.
E-mail Address of Su	rick.w.schultz@lrl02.usace.army.mil
E-mail Address of Engineering Chief or Construction Chief	bruce.c.murray@lrl02.usace.army.mil
E-mail Adress of Director of Engineering & Technical Services	bruce.c.murray@lrl02.usace.army.mil
Date	1999-02-11 00:00:00

17 February 1999 - Concur - Dale Otterness, HQUSACE (CEMP-ET)

Recommended Changes to Engineering Documents Data	
Identification No.	26
Name	Walter John Heimbaugh
Job Title	Civil Engineer
Organization	CE-NWK-PE-C
Telephone No	816-983-3306
E-mail Address	walter.j.heimbaugh@usace.army.mil
Document No	01000
Document Title	All specs
Subject	Marking amendment standards
Problem	Presently there is no standard way to address amendments. The Government and the Contracting Comunity need a standard to work from.
Solution	I am requesting that the Specsintact programers be given the following direction. 1. Task two the tool bar may give Army, Navy and Nasa as a default to be set up in the config program. 2. Task one add a tool bar for marking amended items. 3. When using the amendment tool bar it first states the last amendment number used on the spec file. 4. The amendment default markings should be removed when new amendment number is set via pop-up-window and asking are you sure? 5. Set the Army default as a vertical bar on both sides of the page text margins after the part is highlighted. Design Editors procedure: 1. Set default in config menu. (Done only once during the setup of specsintact system) 2. Open a section or file to be edited. 3. Edit changes. 4. Highlight with mouse the changes. 5. Click on Amendment tool bar. 6. Verify amendment number click ok or change number. (If a person changes the number it will delete all history of amendment markings.)
E-mail Address of Supe	marshal.s.thompson@usace.army.mil
E-mail Address of Engineering Chief or Construction Chief	james.l.goering@uasce.army.mil
E-mail Adress of Director of Engineering & Technical Services	heimbaugh@planetkc.com
Date	1999-02-17 00:00:00

19 March 1999 - See Comments - Rick Dahnke, HQUSACE (CEMP-ET)

COMMENTS: With the use of Electronic Bid Solicitations (EBS) and broader access to solicitations, more uniform and consistent handling of amendments becomes very desirable. Action

has been started by the Corps Specifications Steering Committee (CSSC) to have both the SPECSINTACT group and the Tri-Service CADD group develop recommendations for producing amendments for projects using EBS. The solution you propose will be made available to the people working on the project.

13

Data Format Page

Recommended Changes to Engineering Documents Data	
Identification No.	29
Name	ROY T. HIGA
Job Title	ELEC ENGR
Organization	CEPOD-ET-E
Telephone No	808-438-8527
E-mail Address	ROY.HIGA@USACE.ARMY.MIL
Document No	FORM 3078
Document Title	RECOMMENDED CHANGES TO ENGINEERING DOCUM
Subject	ELECTRONIC ATTACHMENT
Problem	THE ELECTRONIC FORM 3078 IS A VERY CONVENIENT MEANS OF SUBMITTING RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS.HOWEVER, A LOT OF TIMES, WE NEED TO SUPPORT OUR RECOMMENDATIONS USING GRAPHS/TABLES/ILLUSTRATIONS FROM TECHNICAL MANUALS, BOOKS, ETC. BUT THERE IS NO PROVISION FOR INCLUDING ELECTRONIC ATTACHMENTS TO THIS FORM.
Solution	AS DEMONSTRATED BY CURRENT E-MAIL TECHNOLOGY, SOFTWARE HAS BEEN DEVELOPED WHEREBY ELECTRONIC ATTACHMENTS CAN BE READILY ADDED TO A PARENT ELECTRONIC DOCUMENT. INCORPORATING THIS TECHNOLOGY TO THE ELECTRONIC FORM 3078 WILL TREMENDOUSLY IMPROVE FORM 3078 SUBMITTAL PROCESS. ALSO, THE WAY THINGS ARE DEVELOPING, IT APPEARS THAT MUCH, IF NOT ALL, OF THE CORP-WIDE 'APPLICATION' PROGRAMS WILL BE WEB-BASED AND HAVING THE CAPABILIIY TO ADD ELECTRONIC ATTACHMENTS WILL GREATLY ENHANCE THESE SYSTEMS. TOWARD THIS END, RECOMMEND ESTABLISH A HQ-FUNDED PROJECT TO DEVELOP A 'STANDARD' SOFTWARE MODULE THAT CAN BE READILY INCORPORATED INTO WEB-BASED, CORPS-WIDE APPLICATION PROGRAMS SUCH AS FORM 3078, PAX, ETC. A STANDARD SOFTWARE MODULE IS OBVIOUSLY MORE COST EFFECTIVE THAN INDIVIDUALLY-TAILORED SOFTWARE.
E-mail Address of Supervisor	BONG.S.YOO@USACE.ARMY.MIL
E-mail Address of Engineering Chief or Construction Chief	BONG.S.YOO@USACE.ARMY.MIL
E-mail Adress of Director of Engineering & Technical Services	LOUIS.C.CARR@USACE.ARMY.MIL
Date	1999-03-10 00:00:00

26 March 1999 - See Comments - Rick Dahnke HQUSACE (CEMP-ET)

COMMENTS: The initial automated 3078 form has proven to be a valuable means of gathering feedback on engineering documents, and ennhancements to the form are planned as time and funds become available. The next step will be providing for attachments to the form and automatic transmission of copies to those in the chain of command. Inital investigation indicates that these additions will require minimal resources, so there is portential for this work to be accomplished within the next few months.

15

Data Format Page

Recommended Changes to Engineering Documents Data	
Identification No.	34
Name	William C. Thames
Job Title	Mechanical Engineer
Organization	CESAM-EN-DR
Telephone	334-690-2671
E-mail Add	william.c.thames.jr@sam.usace.army.mil
Document No	CEGS14240
Document Title	ELEVATORS, HYDRAULIC
Subject	PVC Casing for Hydraulic Elevator Cylinder/plunger
Problem	The state of Florida requires PVC casing on hydraulic elevator plungers. Our specifications do not have PVC as an option.
Solution	Add schedule 80 PVC as an optional material for hydraulic elevator plungers in paragraph 3.3 of specification 14240.
E-mail Address of Sup	james.p.kastner@sam.army.usace.mil
E-mail Address of Engineering Chief or Construction Chief	hal.smith@sam.army.usace.mil
E-mail Adress of Director of Engineering & Technical Services	Carl.Postlewate@sad01.usace.army.mil
Date	1999-03-22 00:00:00

5 April 1999 - Concur - Robert M. Diangelo HQUSACE (HQUSACE (CEMP-ET)

EIRS BULLETIN
99-01

CURRENT DESIGN CRITERIA

Recently Issued Criteria:

a. Problem: There have been instances where current design criteria were not used in project designs because designers were not aware of recently issued Engineering and Design documents.

b. Probable Solution: With the use of electronic distribution methods, recently issued Engineering and Design documents are now available to a wider user base and available in a much shorter time. Distribution methods now include the following:

(1) Current Military Programs Engineering and design criteria are available on the TECHINFO web site at URL: ***http://www.hnd.usace.army.mil/techinfo/index.htm*** . For further information on TECHINFO, call the Huntsville Engineering and Support Center, CEHNC-ED-ES-G, at (256) 895-1821 between 8:00 a.m. and 4:00 p.m., Central Time. A listing of recently updated engineering and design documents, including guide specifications for construction, is at web site: ***http://www.hnd.usace.army.mil/techinfo/misc/*****pubchg.pdf** .

(2) Engineering and Design criteria for Civil Works and Military Programs are distributed on the “Construction criteria Base (CCB)” system, National Institute of Building Sciences (NIBS). CCB is available in CD-ROM format and is on the CCB web site at ***http://www.nibs.org/ccb***. Information about subscribing to CCB may be obtained by calling NIBS at (202) 289-7800.

(3) Other design related regulations and technical publications are available at the HQUSACE web site which has a link from the TECHINFO site.