

# START

## ENGINEERING CHANGE NOTICE

Page 1 of 4

0022520

1. ECN ~~1-232~~  
Proj. ECN B-714-91

2. ECN Category (mark one) Supplemental <input checked="" type="checkbox"/> Direct Revision <input type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Supersedure <input type="checkbox"/> Discovery <input type="checkbox"/> Cancel/Void <input type="checkbox"/>	3. Originator's Name, Organization, MSIN, and Telephone No. G. L. Koci, KEH, E6-31, 6-6049		4. Date <u>5</u> <sup>5-15-91</sup> <u>07-15-91</u>
	5. Project Title/No./Work Order No. See Block 12	6. Bldg./Sys./Fac. No. 218-E-16	7. Impact Level <u>3</u>
	8. Document Number Affected (include rev. and sheet no.) See Block 12	9. Related ECN No(s). B-714-78, -81	10. Related PO No. N/A

11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input type="checkbox"/> No (NA Blks. 11b, 11c, 11d) UNKNOWN	11b. Work Package Doc. No. UNKNOWN	11c. Complete Installation Work _____ Cog. Engineer Signature & Date	11d. Complete Restoration (Temp. ECN only) _____ Cog. Engineer Signature & Date
---	---------------------------------------	--	---

12. Description of Change

Block 5: B-714, Grout Vault Pair (218-E-16-102 & 103)(218-E-16-104 & 105)/ER8007  
 Block 8: Specification B-714-C2, Rev 1 (V-B714C2-003, Rev 1)

1) SECTION 01720 (affects ECN B-714-78, item 3A)

Change paragraph 1.4.6.11 to read:  
 Weld Identification: Deliver map required in Section 03301, subparagraph 3.2.3.4.d and documentation required in Section 05500, Paragraph 3.2.2.

2) SECTION 03301

A) Subparagraph 3.2.3.4.d: Change to read:  
 "Weld Identification: Maintain and complete map of rebar welded splices. Deliver to KEH before concrete placement." Subarticles 1), 2), and 3) remain the same.

B) Subparagraph 3.2.8.1: Delete 2nd & 3rd sentences.

C) Paragraph 3.3.3 & subparagraph 3.3.3.1: Delete in their entirety.

D) Pg 03301-30: Delete form KEH-433 in its entirety. Form to be added to Section 05500.

E) Pg 03301-29: Add "END OF SECTION" at bottom of page after Paragraph 3.5.2.

13a. Justification (mark one) Criteria Change <input type="checkbox"/> Design Improvement <input checked="" type="checkbox"/> Environmental <input type="checkbox"/> As-Found <input type="checkbox"/> Facilitate Const. <input type="checkbox"/> Const. Error/Omission <input type="checkbox"/> Design Error/Omission <input type="checkbox"/>	13b. Justification Details Welding requirements, submittals, and qualifications have been consolidated in Section 05500 for safety class and non-safety class simplification. These changes do not impact the integrity of the vault structure.
--	--

14. Distribution (include name, MSIN, and no. of copies)	
<u>KEH DISTRIBUTION</u>	J. K. Epperley S0-05
Const Doc Cntl E2-50	O. A. Halverson R3-10
Engng Doc Cntl E6-52	J. S. Hill [2] H4-57
	K. S. McCullough, N1-83
	D. B. Powell [4] R4-03
<u>WHC DISTRIBUTION</u>	J. E. Vanbeek R3-27
Project Files R1-28	DOE
S. R. Briggs(PE) R3-27	A. G. Lassila A5-18
T. K. Cordray S1-54	
STATION 10 A3-87	
Lupe GARZA A3-80	

  
 OFFICIAL RELEASE  
 BY WHC  
 DATE MAY 17 1991  
 STA 4

9 2 1 2 6 4 0 6 0 4

# ENGINEERING CHANGE NOTICE

**15. Design Verification Required**

Yes  
 No

**16. Cost Impact**

ENGINEERING

Additional  \$ 600  
Savings  \$ \_\_\_\_\_

CONSTRUCTION

Additional  \$ 1500  
Savings  \$ \_\_\_\_\_

**17. Schedule Impact (days)**

Improvement  NA  
Delay  \_\_\_\_\_

**18. Change Impact Review:** Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 12. Enter the affected document number in Block 19.

<p>SDD/DD <input type="checkbox"/></p> <p>Functional Design Criteria <input type="checkbox"/></p> <p>Operating Specification <input type="checkbox"/></p> <p>Criticality Specification <input type="checkbox"/></p> <p>Conceptual Design Report <input type="checkbox"/></p> <p>Equipment Spec. <input type="checkbox"/></p> <p>Const. Spec. <input type="checkbox"/></p> <p>Procurement Spec. <input type="checkbox"/></p> <p>Vendor Information <input type="checkbox"/></p> <p>OM Manual <input type="checkbox"/></p> <p>FSAR/SAR <input type="checkbox"/></p> <p>Safety Equipment List <input type="checkbox"/></p> <p>Radiation Work Permit <input type="checkbox"/></p> <p>Environmental Impact Statement <input type="checkbox"/></p> <p>Environmental Report <input type="checkbox"/></p> <p>Environmental Permit <input type="checkbox"/></p>	<p>Seismic/Stress Analysis <input type="checkbox"/></p> <p>Stress/Design Report <input type="checkbox"/></p> <p>Interface Control Drawing <input type="checkbox"/></p> <p>Calibration Procedure <input type="checkbox"/></p> <p>Installation Procedure <input type="checkbox"/></p> <p>Maintenance Procedure <input type="checkbox"/></p> <p>Engineering Procedure <input type="checkbox"/></p> <p>Operating Instruction <input type="checkbox"/></p> <p>Operating Procedure <input type="checkbox"/></p> <p>Operational Safety Requirement <input type="checkbox"/></p> <p>IEFD Drawing <input type="checkbox"/></p> <p>Cell Arrangement Drawing <input type="checkbox"/></p> <p>Essential Material Specification <input type="checkbox"/></p> <p>Fac. Proc. Samp. Schedule <input type="checkbox"/></p> <p>Inspection Plan <input type="checkbox"/></p> <p>Inventory Adjustment Request <input type="checkbox"/></p>	<p>Tank Calibration Manual <input type="checkbox"/></p> <p>Health Physics Procedure <input type="checkbox"/></p> <p>Spares Multiple Unit Listing <input type="checkbox"/></p> <p>Test Procedures/Specification <input type="checkbox"/></p> <p>Component Index <input type="checkbox"/></p> <p>ASME Coded Item <input type="checkbox"/></p> <p>Human Factor Consideration <input type="checkbox"/></p> <p>Computer Software <input type="checkbox"/></p> <p>Electric Circuit Schedule <input type="checkbox"/></p> <p>ICRS Procedure <input type="checkbox"/></p> <p>Process Control Manual/Plan <input type="checkbox"/></p> <p>Process Flow Chart <input type="checkbox"/></p> <p>Purchase Requisition <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p> <p>_____ <input type="checkbox"/></p>
--	--	---

**19. Other Affected Documents:** (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision

Document Number/Revision

Document Number/Revision


**Approvals**

	Signature	Date		Signature	Date
<u>OPERATIONS AND ENGINEERING</u>			<u>ARCHITECT-ENGINEER</u>		
Cog./Project Engineer	<u>R. B. ...</u>	<u>5/15/91</u>	PE	<u>K. C. ...</u>	<u>5/15/91</u>
Cog./Project Engr Mgr	<u>R. D. ...</u>	<u>5/15/91</u>	QA	<u>T. D. ...</u>	<u>5/15/91</u>
QA	<u>J. K. ...</u>	<u>5-15-91</u>	Safety	<u>D. ...</u>	<u>5-15-91</u>
Safety	_____	_____	Design	<u>C/S: ...</u>	<u>5/15/91</u>
Security	_____	_____	Other	<u>SPECS: ...</u>	<u>5/15/91</u>
Proj. Prog./Dept. Mgr.	_____	_____	<u>ENVIR: ...</u>	<u>R. ...</u>	<u>5/15/91</u>
Def. React. Div.	_____	_____			
Chem. Proc. Div.	_____	_____			
Def. Wst. Mgmt. Div.	_____	_____	<u>DEPARTMENT OF ENERGY</u>		
Adv. React. Dev. Div.	_____	_____			
Proj. Dept.	_____	_____			
Environ. Div.	_____	_____	<u>ADDITIONAL</u>		
IRM Dept.	_____	_____			
Facility Rep. (Ops)	_____	_____			
Other	_____	_____			

40605

Block 12 continued from Pg 1

3) Section 05500

- A) Paragraph 1.2.4 (affects ECN B-714-78, item 6G) - Change 1st sentence to read as follows: For filler metal used for pits, pit cover blocks, cover block sleeves, cover block plugs, pit floor plates, drain seal assemblies and hose handle assemblies, submit certified material test...
- B) Paragraph 2.2.2: Delete in its entirety.
- C) Subparagraph 2.2.2.1 (affects ECN B-714-81, item 9C) - Change to read as follows: Make joints at intersection and end pieces with complete penetration butt splice welds or weld lap splicing as show on Drawings.
- D) Add Paragraph 3.1.3 as follows:
- 3.1.3 Waterstop and other embedded items shall be free of mud, oil, or other material to facilitate bonding to concrete.
- E) Paragraph 3.2.1, subparagraph 3.2.1.1, & Paragraph 3.2.2 (affects ECN B-714-78, item 6J) - Change to read as follows:
- 3.2.1 Visual Examination
- 3.2.1.1 Waterstop Field Joint: Perform 100 percent visual examination of fit-up, root, and cover passes of steel waterstop welds. Acceptance criteria for welds shall be in accordance with AWS D1.1, paragraph 8.15.1.
- 3.2.1.2 Pits, pit cover blocks, cover block sleeves, cover block plugs, pit floor plates, drain seal assemblies, and hose handle assembly: Perform 100 percent visual examination of final welding configuration in accordance with AWS D1.1, 8.15.1.
- 3.2.2 NDE Documentation:
- 3.2.2.1 Waterstop Field Joint: Document examination of fitup and cover pass on NDE/Weld Record Form KEH-433, sample appended, furnished by KEH. Deliver completed weld documentation to KEH before concrete placement.
- 3.2.2.2 Pits, pit cover blocks, cover block sleeves, cover block plugs, pit floor plates, drain seal assemblies, and hose handle assembly: Document visual examination of welds by stamping or signing CWI number/name and date on weld identification drawings or sketches. Documentation shall be traceable to individual vaults and individual pits on vaults. Deliver completed weld documentation to KEH at completion of individual vaults.
- F) Add page 5 (KEH Form 0433.00) as shown on page 4 of this ECN. Move "END OF SECTION" from bottom of page 4 to bottom of page 5 as shown on page 4 of this ECN.

NDE/WELD RECORD		1. Project W.O. No.		2. Weld Identification Dwgs.			
4. WELD INFORMATION	5. VISUAL EXAMINATION			6. LIQUID PEN. / MAG PART	7. RADIO	9. OTHER	
	Fit-up	Root Pass	Cover Pass		8. LEAK TEST		
Id No.				Root Pass	Radiographic		
Welder Identification							
Welding Procedure Specification				Cover Pass	Leak Test		
Weld Filler Mat'l.							
Weld No.				Root Pass	Radiographic		
Welder Identification							
Welding Procedure Specification				Cover Pass	Leak Test		
Weld Filler Mat'l.							
Weld No.				Root Pass	Radiographic		
Welder Identification							
Welding Procedure Specification				Cover Pass	Leak Test		
Weld Filler Mat'l.							
Weld No.				Root Pass	Radiographic		
Welder Identification							
Welding Procedure Specification				Cover Pass	Leak Test		
Weld Filler Mat'l.							
Weld No.				Root Pass	Radiographic		
Welder Identification							
Welding Procedure Specification				Cover Pass	Leak Test		
Weld Filler Mat'l.							
Weld No.				Root Pass	Radiographic		
Welder Identification							
Welding Procedure Specification				Cover Pass	Leak Test		
Weld Filler Mat'l.							
END OF SECTION							