START 9513358.1155 0040952

Mr. John Grantham
State of Washington
Department of Ecology
Nuclear & Mixed Waste Program
P. O. Box 47600
Olympia, WA 98504-7600

FLUOR DANIEL, INC.

Date: October 11, 1994

Reference: Hanford Waste Vitrification Plant
DOE Contract DE-AC06-86RL10838
Fluor Contract 8457

Transmittal No.: WDOE-980

Dear Mr. Grantham:

TRANSMITTAL

We enclosed 2 copy of the items listed below. These are issued per US-DOE request.

[] Approval [] Reference [] Review and Comment [X] DCN-RFC

Response due to Fluor: N/A
Responds to: A160 PACKAGE

NUMBER	REV	DATE	TITLE
DCN - 0197	0	10/07/94	DELETION OF RWX PUMP HOUSE "RELEASED FOR CONSTRUCTION"

Reference: FRP-1480, FUP-897
Distribution:
R. L. Long - DOE-RL, w/0
TWP/AME Corresp Cntrl Cntr MSIN A5-10
(A160 PACKAGE), w/0
P. Felise - WHC-RL (MSIN G6-06), w/1
Environmental Data Management Center
(MSIN H6-08), w/1
D. Duncan - US EPA, Region X, w/0
M. D. Talbot, WHC - w/0

Very truly yours,

Nazy Eshraghi for/
R.S. Poulter
Project Director

RSP:BE:fps

RECEIVED EDMC OCT 1994

9513358.1156

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV 0	PAGE 1 OF 31
DCN TITLE: DELETION OF RWX PUMP HOUSE		DATE INITIATED: 7/22/94
		PACKAGE NO.: A160

SECTION 1: DESCRIPTION OF CHANGE

THIS DCN CONTAINS A PORTION OF THE WORK DESCRIBED IN CR-HWVP-1111, REV 1 AND COVERS THE FOLLOWING FOUR GENERAL ITEMS:

- DELETE THE RWX PUMP HOUSE AND ALL ASSOCIATED UTILITIES (SWX, RWX, DRX, IAX, FWX, ET, PAX, ELECTRICAL POWER AND GROUNDING CABLE) ASSOCIATED WITH THIS BUILDING.
- DELETE THE PRECAST CONCRETE DRAINAGE VAULT LOCATED OUTSIDE AND ADJACENT TO THE SOUTH WEST CORNER OF THE RWX PUMP HOUSE.
- DELETE THE SUMP PUMP IN THE RWX MANIFOLD SHELTER (PX-530-016) AND ASSOCIATED SUMP PUMP ELECTRICAL AND PIPING EQUIPMENT.
- INSTALL A BLIND FLANGE ON THE STUBBED UP DRX PIPE LOCATED ON THE SOUTH SIDE OF THE RWX MANIFOLD SHELTER. DELETE ELECTRICAL HEAT TRACING (ET[W])ON LINE DRX-4"-530-010-G.

REFER TO DCN-0194 FOR OTHER WORK COVERED BY CR-HWVP-1111.
FOR LIST OF AFFECTED DOCUMENTS, SEE SECTIONS 6 AND 7.

CAUSE OF CHANGE:

- ☐ Field Change Request
- ☐ Supplier Disposition
- ☐ Deficiency Report
- ☐ Design Development
- ☒ Change Request
- ☐ TBD/Hold
- ☐ Other _____

Initiating Document(s)

CR-HWVP-1111, REV 1

SECTION 2: EVALUATION

			IF "YES", ADDITIONAL REVIEW REQUIRED BY:	REVIEWER COMMENTS AND SIGNATURE/DATE
WAPA DWG/SPEC?	☒ NO	☐ YES	ARCHITECTURAL	No Comments J Datte 7/21/94
QUALITY LEVEL I DWG/SPEC?	☒ NO	☐ YES	CIVIL	NO COMMENTS B. Eisenbein 7/21/94
SAFETY CLASS 1 OR 2 DWG/SPEC?	☒ NO	☐ YES	PIPING	No Comments [illegible] 7/21/94
SYSTEMS ANALYSES AFFECTED?	☒ NO	☐ YES	CONTROL SYSTEMS	NO COMMENTS J. Costigan 7/21/94
MULTI-DISCIPLINE CHANGE?	☐ NO	☒ YES	ELECTRICAL	NO COMMENT [illegible] 7/21/94
			STRUCTURAL	NO COMMENT [illegible] 7/21/94
			MECHANICAL	NO COMMENT [illegible] 7/21/94

DCN Evaluated by: Systems Patrick Grant 7/21/94 ADM B. Eisenbein Others _____

SECTION 3: APPROVED FOR CONSTRUCTION

[signature] 7/21/94 — Originator — Date

[signature] 7/21/94 — Project/Resident Engineer — Date

SECTION 4: CONCURRENCE

[signature] 8/17/94 — Project Management — Date

[signature] 8-18-94 — Systems — Date

[signature] 8/16/94 — Independent Safety — Date

[signature] 8-18-94 — Quality Assurance — Date

Frances Stokes 8-18-94 — Configuration Management — Date

SECTION 5: RELEASED FOR CONSTRUCTION

PE STAMP REQUIRED? ☐ NO ☒ YES

[signature] 8/25/94 — WHC — Date

[signature] 8-26-94 — UCAT — Date

[signature] 10/4/94 — DOE — Date

COMMENTS:

FORM REV. 09/23/93
P:\8457\DCNS\ 07/21/94 2:26pm

9513350.1157

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN -0197	REV 0	DISCIPLINE CIVIL	PKG. NO. A160	PAGE 2

PREPARED BY: Dennis L. Martin Date: 7/21/94

DISCIPLINE ENGINEER: Bruce R. Eisenbeis Date: 7/21/94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-117156	1	5	CIVIL, UNDERGROUND UTILITY PLAN	N	DELETE RWX PUMP HOUSE, AND ASSOCIATED UTILITY LINES AS NOTED ON DWG H-2-117160, DETAIL "A"; DELETE RWX-12"-500-008-RF LINE AND SWX-10"-490-084-R LINE FROM STA 2+00 EASTERLY TO "B" PLANT AND DRX-4"-530-132-R LINE FROM STA 3+62.15 EASTERLY TO "B" PLANT.
H-2-117160	1	5	CIVIL, UNDERGROUND UTILITY PLAN	N	DELETE RWX-12"-500-008-RF, SWX-10"-490-084-R AND DRX-4"-530-132-R LINES; DETAIL "A": DELETE RWX PUMP HOUSE, REFERENCE TO DETAIL 13, DWG H-2-117162 AND DRX-4"-530-130-R LINE; ADD BLIND FLANGE & TERMINATE SWX-10'-490-084-R LINE AT N 42547.33, SWX-10"-490-001-R LINE AT W 55677, RWX-12"-500-008-RF LINE AT W 55682.32, RWX-10"-500-077-RF LINE AT W 55678, FWX-6"-500-102-RF LINE AT N 42540.2 AND DRX-4"-530-008-R LINE AT W 55722.25; AND REVISE DRX-4"-530-046-R PER DCN-0194; DETAIL NO.1: DELETE RWX-12-500-008-RF LINE UP TO VALVE MV-RWX-036 AND RWX-10"-500-077-RF LINE UP TO VALVE MV-RWX-18A; RELEASE HOLD NO. HWVP-FD-433, PLACED BY DCN-0128
H-2-117161	1	3	CIVIL, UNDERGROUND UTILITIES SECTIONS & DETAILS	N	REVISE DETAIL NO. 6 TO SHOW DRX-4"-530-046-R CROSSING
H-2-117162	1	3	CIVIL, UNDERGROUND UTILITIES SECTIONS & DETAILS	N	DELETE DETAIL NO. 11 AND RELEASE HOLD NO. HWVP-FD-433, PLACED BY DCN-0128; DELETE DETAIL NO. 13 AND REVISE DETAIL NO.23 TO SHOW DRX-4"-530-046-R CROSSING PER DCN-0194

9513358.1158

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN -0197	REV 0	DISCIPLINE CIVIL	PKG. NO. A160	PAGE 3

PREPARED BY: Dennis R. Watson Date: 7/21/94

DISCIPLINE ENGINEER: [illegible] Date: 7/21/94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-117165	1	5	CIVIL, DRX LINES PROFILES	N	REVISE DRX-4-530-008-R PROFILE: DELETE DRAINAGE VAULT AT STA 0+12.75 AND ADD BLIND FLANGE; REVISE DRX-4-530-047-R PROFILE FROM STA 1+25.00 TO STA 2+91.00-DRX-4"-530-046-R; AND DELETE DRX-4"-530-132-R FROM STA 3+62.15 TO STA 16+96.82.
H-2-117176	1	3	CIVIL, SWX AND RWX PIPE PROFILES	N	REVISE RWX-12"-500-013-RF PROFILE TO REFLECT DRX-4'-530-046-R CROSSING
H-2-117177	1	3	CIVIL, SWX, FWX AND DRX PIPE PROFILES	N	REVISE DRX-4"-530-046-R PROFILE TO REFLECT REALIGNMENT AND CONNECT TO DRX-4-530-047-R LINE
H-2-117179	1	3	CIVIL, SWX AND FWX PIPE PROFILES	N	REVISE SWX-10"-490-084-R PROFILE: DELETE SWX-10"-490-084-R LINE AND RWX-12"-500-008-RF LINE FROM STA 2+00.00 TO STA 3+50.00.

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE
H-2-123358	1	10	P & ID SYSTEM 50 RAW WATER AND FIRE WATER SYSTEMS	DELETED RAW WATER PUMPS AND PORTION OF RWX-10"-500-077-RF LINE, ZONE C-2
H-2-123358	3	3	P & ID SYSTEM 50 RAW WATER AND FIRE WATER SYSTEMS	DELETED PORTION OF RWX-12"-500-008-RF LINE; ADDED CLEANOUT AND BLIND FLANGE TO VALVE MV-RWX-036, ZONES B-7 & B8
H-2-123359	1	9	P & ID SYSTEM 49 SANITARY WATER SYSTEM	DELETED PORTION OF SWX-10"-490-084-R LINE, AND VALVE MV-SWX-001; ADDED CLEANOUT AND BLIND FLANGE TO VALVES MV-SWX-002 AND MV-SWX-003
H-2-123361	7	9	P & ID SYSTEM 53 NONHAZARDOUS WASTE WATER	DELETED RAW WATER BOOSTER PUMP HOUSE, AND AFFILIATED DRX LINES
H-2-117113	1	8	FINAL SITE GRADING AND UTILITIES PLAN	DELETED DRX, RWX & SWX LINES, ZONE D2-D6; DELETED RWX PUMP HOUSE AND REVISE DRX, RWX & SWX LINES, ZONE E7

9513358.1159

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN - 0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	ARCH.	A160	4

PREPARED BY: J. DATTE Date: 7-21-94

DISCIPLINE ENGINEER: J Datte Date: 7-21-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-117897	1	1	ARCHITECTURAL/HVAC GEN NOTES & SCHEDULES	N	DELETE FROM THE ROOM FINISH SCHEDULE THE RWX PUMPHOUSE ROOM NO. 100, AND FROM THE DOOR & FRAME SCHEDULE THE RWX PUMPHOUSE DOOR NO'S 100A & 100B AND UNDER BUILDING DATA DELETE ALL REFERENCE TO THE RWX PUMPHOUSE
H-2-117898	1	2	ARCHITECTURAL/HVAC RWX PUMP HOUSE PLANS, ELEV'S, SECTIONS	N	DELETE THE ENTIRE DRAWING
B-595-C-A160-13120	ATCH 'A' PAGE 1	2	BUILDING ACCESSORIES	N	DELETE EQUIPMENT NO'S A1-05AA-001 THROUGH A1-05AA-003
B-595-C-A160-13120	ATCH 'A' PAGE 2	2	BUILDING ACCESSORIES	N	DELETE EQUIPMENT NO'S BL-05AB-001 THROUGH BL-05AB-003
B-595-C-A160-13120	ATCH 'A' PAGE 3	2	BUILDING ACCESSORIES	N	DELETE EQUIPMENT NO'S UH-05AA-001 AND UH-05AA-002

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1160

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN -0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	Mech	A160	5

PREPARED BY: Donald G. LaBarty Date: 21 JUL 94

DISCIPLINE ENGINEER: Donald G. LaBarty 21 JUL 94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
B-595-C-A160-15145	4	1	Sump Pumps	No	In Paragraph 2.1 Materials and Equipment, delete items PX-530-013A and PX-530-013B from Table.
B-595-C-A160-15145	DS-2	1	Sump Pumps	No	Delete Data Sheet DS-2 in its entirety.
B-595-C-A160-15540	3, 5, 7,14, DS-1	1	Fire Water System Pumps	No	Released Hold No. HWVP-FD-436 placed by DCN-0136.
B-595-C-A160-15540	3	1	Fire Water System Pumps	No	In Paragraph 1.3 Related Requirements, delete Drawing H-2-121655, LP-500-001A and 001B Instrument Panel Layout.
B-595-C-A160-15540	6	1	Fire Water System Pumps	Yes	Revised wording of last sentence of last paragraph of 2.1.1.
B-595-C-A160-15540	7	1	Fire Water System Pumps	No	In Paragraph 2.1.2.F. Baseplates and SUpports, delete items PX-500-001A/B from Anchor Bolt Size table
B-595-C-A160-15540	14	1	Fire Water System Pumps	No	Delete Paragraph 2.2.10.D. in its entirety.
B-595-C-A160-15540	DS-1	1	Fire Water System Pumps	No	Delete Data Sheet DS-1 in its entirety.

9513358.1161

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US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN -0197	REV 0	DISCIPLINE MECH	PKG. NO. A160	PAGE 6

PREPARED BY: [illegible] Date: 21 July 94

DISCIPLINE ENGINEER: [illegible] Date: 21 July 94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
B-595-C-A160-16150	DS-1	1	Motors - Induction	No	Deleted motors for pump item numbers PX-530-013A and PX-530-013B

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE
H-2-123358	3 of 3	3	P & ID System 50 Raw Water and Fire Water Systems	Deletion of mechanical equipment in the Raw Water Booster Pump House
H-2-123361	7 of 9	9	Piping & Instrumentation Diagram System 53 Nonhazardous Waste Water Disposal	Deletion of mechanical equipment in the Raw Water Booster Pump House

9513358.1162

Page 6: Paragraph 2.1.1 General Requirements

Revise last sentence of last paragraph from:

"Pump Characteristics and selection shall be in accordance both with Chapter 3 of NFPA 20 and data shown on DS-1 through DS-4 (Attachment A)."

To read:

"Pump Characteristics and selection shall be in accordance both with Chapter 3 of NFPA 20 and data shown on DS-2 through DS-4 (Attachment A)."

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE		
DESCRIPTION OF CHANGE Deletion of Raw Water Booster Pump House		BASE DOC. NO. B-595-C-A160-15540 SHT/PG. 6 REV. 1		
		DISCIPLINE: Mechanical		
PREPARED BY: Donald G. LaBaunty	DATE: 21 July 94	DCN - 0197	REV 0	PAGE 7
DISCIPLINE ENGINEER: Donald G. LaBaunty	DATE: 21 July 94			

FORM REV. 09/23/93
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FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	ELECTRICAL	A160	8

PREPARED BY: D. J. Wood Date: 7-21-94

DISCIPLINE ENGINEER: [illegible] Date: 7-21-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-122083	1	2	ONE LINE DIAGRAM	N	DELETE ALL POWER FEEDERS OR PORTIONS OF POWER FEEDERS WHICH ARE SHOWN ROUTED TO THE RAW WATER PUMP HOUSE (BLDG NO. 21). RELEASE HOLD NO. HWVP-FD-437 DELETE POWER FEEDER TO PX-530-016 IN THE MANIFOLD SHELTER (BLDG NO. 23)
H-2-122085	1	3	UNDERGROUND CONDUIT & GROUNDING PLAN	N	DELETE ALL ELECTRICAL, U/G & OVERHEAD, IN & AROUND THE RAW WATER PUMP HOUSE (BLDG NO. 21) THIS INCLUDES, BUT IS NOT LIMITED TO U/G PULLBOXES, MANHOLES, ALL CONDUIT & CONDUCTORS, FITTINGS, ETC.
H-2-122086	2	0	UNDERGROUND SECTIONS	N	DELETE ALL SECTIONS ON THIS DWG

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1164

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	ELECTRICAL	A160	9

PREPARED BY: J. S. Wood Date: 7-21-94

DISCIPLINE ENGINEER: [illegible] Date: 7-21-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-122087	2	1	INSTRUMENT, CONDUIT ROOTING PLAN BLDG 21 & 23	N	DELETE ALL ELECTRICAL IN THE RAW WATER PUMP HOUSE. THIS INCLUDES BUT IS NOT LIMITED TO CONDUIT, CONDUCTOR, BOXES, FITTINGS, ETC. RELEASE HOLDS NO.S HWVP-FD-440, HWVP-FD-449, HWVP-FD-454 AND HWVP-FD-450. DELETE ALL CONDUITS & WIRING, BOXES, FITTINGS, GROUNDS, (ALL ELECTRICAL) ROUTED TO/FROM PX-530-016, LE-DRX-601 AND LSH/LSL-DRX-601.
H-2-122089	1	3	PWR, GNDG, HT. TR. & LTNG. PROT. PLAN BLDG 21 & 23	N	DELETE ALL ELECTRICAL IN & AROUND THE RAW WATER PUMP HOUSE (BLDG NO. 21). THIS INCLUDES, BUT IS NOT LIMITED TO CONDUIT, CONDUCTORS, FITTINGS, BOXES, GROUNDING, HT. TRACING, ETC. RELEASES HOLD NO. HWVP-FD-450 DELETE POWER & GROUNDING TO PX-530-016 IN THE MANIFOLD SHELTER

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1165

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	ELECTRICAL	A160	10

PREPARED BY: J. S. Wood Date: 7-21-94

DISCIPLINE ENGINEER: [illegible] Date: 7-21-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-122091	1	1	LIGHTING & COMMUNICATION PLANS - BLDGS 20, 21 & 23	N	DELETE ALL ELECTRICAL IN & AROUND THE RAW WATER PUMP HOUSE (BLDG NO. 21).
H-2-122093	1	3	UNDERGROUND CABLE PLAN	N	DELETE ALL ELECTRICAL ROUTED TO OR FROM THE RAW WATER PUMP HOUSE (BLDG NO. 21). DELETE ALL ELECTRICAL IN OR AROUND THE RAW WATER PUMP HOUSE (BLDG NO. 21). DELETE SECTION "AB"
H-2-122094	1	1	POWER, LTG. & HEAT TRACING SECTIONS & DETAILS	N	DELETE CONDUIT/CONDUCTORS TO & FROM STARTER FOR PX-530-016 SHOWN IN SECTION "AC"
H-2-122098	1	2	PANEL SCHEDULES	N	DELETE PANEL SCHEDULES FOR PANELS DA-32A-802 & DA-32A-853
H-2-122099	1	2	ELEMENTARY DIAGRAMS	N	DELETE DIAGRAM NO. 19, DELETE PX-530-016, 013 A & B FROM DIAGRAM NO. 14

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1166

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	ELECTRICAL	A160	11

PREPARED BY: J. T. Wood Date: 7-21-94

DISCIPLINE ENGINEER: [signature] Date: 7-21-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-122099	2	1	ELEMENTARY DIAGRAMS	N	DELETE BL-05AB-001, 002, 003 FROM DIAGRAM NO. 23 & TABLE NO. 4
H-2-122100	2	1	CONN. DIAGRAMS TB-21-X1, TB-21-A/B1 & TB-23-A/B1	N	DELETE TB-21-X1, & TB-21-A/B1 AND ALL ASSOCIATED CONDUIT & WIRING DELETE WIRING/CONDUIT TO LSH/L-DRX-601 & LE-DRX-601 RELEASE HOLD NO.S HWVP-FD-440 AND HWVP-FD-450
H-2-122100	7	0	CONN. DIAGRAMS LP-500-001A/001B	N	DELETE LP-500-001A, 001B AND ALL ASSOCIATED CONDUIT & WIRING. RELEASE HOLD NO. HWVP-FD-450.
H-2-122100	8	0	CONN. DIAGRAMS LP-500-008A, 008B & TB-23-P1	N	DELETE THE PANEL SHOWN AS LP-500-008B ON THIS DWG & LOCATED IN THE RAW WATER PUMP HOUSE. DELETE ALL CONDUIT/WIRING ASSOCIATED WITH THIS PANEL. RELEASE HOLD NO. HWVP-FD-440.

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1167

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN - 0197	REV 0	DISCIPLINE ELECTRICAL	PKG. NO. A160	PAGE 12

PREPARED BY: J. S. Wood Date: 7-21-94

DISCIPLINE ENGINEER: [illegible] Date: 7-21-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
SPECIFICATION B-595-C-A160-16111					
ATTACHMENT"A"	VARIOUS	2	CONDUIT SCHEDULE	N	DELETE ALL UN-INSTALLED CONDUITS & CABLES WHICH ARE LOCATED IN OR AROUND OR ARE ROUTED TO OR FROM THE RAW WATER PUMP HOUSE (BLDG 21)
ATTACHMENT"B"		2	CONDUIT SCHEDULE	N	

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1168

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN - 0197	REV 0	DISCIPLINE CONTROL SYSTEMS	PKG. NO. A160	PAGE 13

PREPARED BY: JOHN COSTIGAN Date: 7/20/94

DISCIPLINE ENGINEER: J. Costigan Date: 7/20/94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
SPECIFICATION B-595-C-A160-17801	10, 13, 15, 18, 19, 23	2	MECHANICAL SITE UTILITIES INSTRUMENTATION	Y	RELEASED HOLD NO. HWVP-FD-451 PUT ON PER DCN-0160, REV1; DELETED INSTRUMENTATION IN RAW WATER BOOSTER PUMP HOUSE.
ATTACHMENT"D"	1	2	MECHANICAL SITE UTILITIES INSTRUMENTATION	Y	DELETED INSTRUMENTATION IN RAW WATER BOOSTER PUMP HOUSE.
B-595-C-A160-11704 ATTACHMENT"B"	4, 5, 6	2	GENERAL INSTRUMENTATION INSTALLATION AND TESTING	Y	RELEASED HOLD NO. HWVP-FD-451 PUT ON PER DCN-0160, REV 1; DELETED INSTRUMENTATION IN RAW WATER BOOSTER PUMP HOUSE.
ATTACHMENT"C"	4, 5, 6	2	GENERAL INSTRUMENTATION INSTALLATION AND TESTING	Y	RELEASED HOLD NO. HWVP-FD-451 PUT ON PER DCN-0160, REV 1; DELETED INSTRUMENTATION IN RAW WATER BOOSTER PUMP HOUSE.
H-2-121204	1	1	INSTRUMENT LOCATION PLAN BUILDINGS 21 & 23	N	DELETED INSTRUMENTATION ASSOCIATED WITH RAW WATER BOOSTER PUMP HOUSE.

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE
H-2-123350	4	7	P&ID SYSTEM 41 PLANT AIR DISTRIBUTION	DCN-0197 RELEASES HOLD NO. HWVP-FD-426 ON DWG H-2-123358 SHT 3; ALSO DELETES INSTRUMENTATION ASSOCIATED WITH RAW WATER BOOSTER PUMP HOUSE.
H-2-123350	7	9	P&ID SYSTEM 41 INST. AIR DISTRIBUTION	" "
H-2-123358	1	10	P&ID SYSTEM 50 RAW WATER AND FIRE WATER	" "
H-2-123358	3	3	P&ID SYSTEM 50 RAW WATER AND FIRE WATER	" "
H-2-123359	1	9	P&ID SYSTEM 49 SANITARY WATER SYSTEM	" "
H-2-123361	7	9	P&ID SYSTEM 53 NONHAZARDOUS WASTE WATER DISP.	" "

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

RELEASED HOLD NO. HWVP-FD-436 DCN-0136

ADDED HOLD NO. HWVP-FD-451 DCN-0160

DELETE PER DCN-0197

TAG NUMBER	RANGE	OPERATING PRESSURE	CONNECTION TYPE - LOCATION
~~PI-RWX-044-1~~	~~0 - 200 psig~~	~~130 psig~~	~~1/2 inch Male NPT - bottom~~
~~PI-RWX-044-2~~	~~0 - 200 psig~~	~~130 psig~~	~~1/2 inch Male NPT - bottom~~
PI-RWX-008	0 - 200 psig	130 psig	1/2 inch Male NPT - bottom
~~PI-RWX-039~~	~~0 - 160 psig~~	~~70 psig~~	~~1/2 inch Male NPT - bottom~~
PI-FWX-384	0 - 160 psig	105 psig	1/2 inch Male NPT - bottom
PI-FWX-364	0 - 60 psig	25 psig	1/2 inch Male NPT - bottom
PI-FWX-015-1	0 - 200 psig	130 psig	1/2 inch Male NPT - bottom
PI-LPW-005-2	0 - 160 psig	85 psig	1/2 inch Male NPT - bottom
PI-FWX-020	0 - 200 psig	130 psig	1/2 inch Male NPT - bottom
PI-FWX-015-2	0 - 200 psig	130 psig	1/2 inch Male NPT - bottom
PI-LPW-005-1	0 - 160 psig	85 psig	1/2 inch Male NPT - bottom
~~PI-DRX-404-1~~	~~0 - 60 psig~~	~~25 psig~~	~~1/2 inch Male NPT - bottom~~
~~PI-DRX-404-2~~	~~0 - 60 psig~~	~~25 psig~~	~~1/2 inch Male NPT - bottom~~
~~PI-DRX-603~~	~~0 - 60 psig~~	~~25 psig~~	~~1/2 inch Male NPT - bottom~~
PI-DRX-503	0 - 60 psig	25 psig	1/2 inch Male NPT - bottom

2.5.1.2 Pressure gauges shall be tested and calibrated at manufacturer's shop to the ranges given. The pressure gauges shown in the table in Paragraph 2.5.1.1 shall be Ashcroft Model Number 1279S or equal.

2.5.1.3 Threaded connections shall be in accordance with ANSI/ ASME B1.20.1.

2.5.1.4 When two or more components of the same specifications are required, the components shall be identical (same manufacturer and catalog number).

2.6 OPERATING AND DESIGN CONDITIONS - PRESSURE GAUGES

2.6.1 Pressure gauges case sizes shall be:

TAG NUMBER	DESCRIPTION	SET POINT	FLUID
LE-FWX-006	Probe (4 in., 150 lbs., R.F. Flange Conn.)	-	Water
LSL-FWX-006A	Control Unit (Relay Contact)	27'-6"	-
LSL-FWX-006B	Control Unit (Relay Contact)	27'-6"	-
LSH-FWX-006	Control Unit (Relay Contact)	31'	-
~~LE-DRX-402~~	~~Probe (4 in., 150 lbs., R.F. Flange Conn.)~~	~~-~~	~~Water~~
~~LSL-DRX-402~~	~~Control Unit (Relay Contact)~~	~~0'-11"~~	~~-~~
~~LSH-DRX-402~~	~~Control Unit (Relay Contact)~~	~~4'-1"~~	~~-~~
~~LSHH-DRX-402~~	~~Control Unit (Relay Contact~~	~~4'-6"~~	~~-~~
LE-DRX-501	Probe (4 in., 150 lbs., R.F. Flange Conn.)	-	Water
LSH-DRX-501	Control Unit (Relay Contact)	1'-8"	-
LSL-DRX-501	Control Unit (Relay Contact)	0'-4"	-
~~LE-DRX-601~~	~~Probe (4 in., 150 lbs., R.F. Flange Conn.)~~	~~-~~	~~Water~~
~~LSH-DRX-601~~	~~Control Unit (Relay Contact)~~	~~1'-8"~~	~~-~~
~~LSL-DRX-601~~	~~Control Unit (Relay Contact)~~	~~0'-4"~~	~~-~~

DELETE PER DCN-0197

2.9.1.2 The switching range of all level switches shall include the set point. The level setpoints shall be independent from each other. The output relay shall be DPDT. Seller shall ensure that switch rating is compatible with the associated load.

2.9.1.3 All level probes shall be factory tested in accordance with manufacturer's standards and procedures for the applicable pressure, temperature, and fluid. The probe and control unit shall be manufactured by Drexelbrook Engineering, Model Number 506-4000-1 or equal. The probes shall be stainless steel with a suitable dielectric insulation. The probes length shall be:

DELETE PER DCN-0197

PROBE	PROBE LENGTH	PROBE CABLE LENGTH
LE-FWX-006	10 feet long	100 feet long
~~LE-DRX-402~~	~~7 feet long~~	~~25 feet long~~
LE-DRX-501	4 feet 10 in	25 feet long
~~LE-DRX-601~~	~~4 feet 10 in~~	~~25 feet long~~

2.9.1.4 The process connection for the sensing probe shall be 4 inch 150 pound R.F. flange.

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

RELEASED HOLD NO. HWVP-FD-436 DCN-0136

ADDED HOLD NO. HWVP-FD-451 DCN-0160

TAG NUMBER	DESCRIPTION	VALVE HANDWHEEL	APPLICATION	BODY SIZE
~~YV-RWX- 049~~	~~On-Off Control Valve~~	~~No~~	~~Water~~	~~10 in., 150 lbs. F.F. Flange~~
~~YY-RWX- 049~~	~~Solenoid Valve (Pilot Valve)~~	~~-~~	~~IAS~~	~~-~~
~~ZSL-RWX- 049~~	~~Limit Switch (Low) - DPDT~~	~~-~~	~~-~~	~~-~~
~~ZSH-RWX- 049~~	~~Limit Switch (High) - DPDT~~	~~-~~	~~-~~	~~-~~
PV-RWX- 005	On-Off Control Valve	Yes	Water	10 in., 150 lbs. F.F. Flange
PY-RWX- 005	Solenoid Valve (Pilot Valve)	-	IAS	-
ZSL-RWX- 005	Limit Switch (Low)- DPDT	-	-	-
ZSH-RWX- 005	Limit Switch (High) - DPDT	-	-	-
YV-SWX-714	On-Off Control Valve	No	Water	4 in., 150 lbs. F.F. Flange
YY-SWX-714	Solenoid Valve (Pilot Valve)	-	IAS	

2.13.1.2 The unregulated instrument air supply pressure to the control valve is a minimum of 60 psig and a maximum of 150 psig, with a dewpoint of -20°F as a maximum. The instrument air is supplied by the Buyer.

2.13.1.3 The Seller shall size all valves and valve actuators for the service conditions given to verify suitable valve performance over the range of flows and pressures. The control valves shall be Posi-Seal/Fisher, Model A31 or equal. This information is to be submitted to the Buyer.

2.13.1.4 The Seller shall calculate anticipated noise level for all control valves at normal and maximum flow. This information is to be submitted to the Buyer. Noise greater than 90 dB, measured three feet from the piping and three feet downstream of the valve, is not permissible.

2.14.4.2.6 All filter-regulator airsets shall be sized to stroke the associated valve in a maximum of five seconds with 80 psig inlet pressure to regulator.

2.14.4.3 Solenoid Valves

2.14.4.3.1 Solenoid valves shall be mounted and piped to the control valve.

2.14.4.3.2 The solenoid valves shall be UL listed or FM approved 3-way switching valves, direct acting, and shall have an electrical rating of 120 Vac, 60 Hz. Solenoid valves shall be ported to provide, in the deenergized state, the valve failure action as shown below:

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

RELEASED HOLD NO. HWVP-FD-436 DCN-0136 ADDED HOLD NO. HWVP-FD-451

VALVE TAG NUMBER	SOLENOID TAG NUMBER	VALVE FAIL POSITION
~~YV-RWX-049~~	~~YY-RWX-049~~	~~Fail Open~~
PV-RWX-005	PY-RWX-005	Fail Closed
YV-SWX-714	YY-SWX-714	Fail Closed

2.14.4.3.3 Solenoid coils shall be molded type Class H insulation (as defined in UL 429) and designed for continuous operation at 110°F ambient air temperatures.

2.14.4.3.4 Solenoid coil enclosures shall be NEMA 4 (steel or aluminum construction) per NEMA 250.

2.14.4.3.5 Instrument port connections shall be 1/4 inch NPT.

2.14.4.3.6 All solenoids shall be piped in accordance with Paragraph 2.14.4.1.1 above.

2.14.4.3.7 Electrical conduit connection shall be 1/2 inch NPT.

2.14.4.3.8 All threaded connections shall be tapered and in accordance with ANSI/ASME B1.20.1.

2.14.4.3.9 Solenoid valves in on/off service shall be rated for an instrument air supply pressure of 150 psig maximum.

2.14.4.4 Limit Switches

2.14.4.4.1 Limit switches shall be mounted to the control valves and tagged as shown below:

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

RELEASED HOLD NO. HWVP-FD-436 DCN-0136

ADDED HOLD NO. HWVP-FD-451 DCN-0160

VALVE TAG NUMBER	LIMIT SWITCH TAG NUMBER
~~YV-RWX-049~~	~~ZSL-RWX-049~~
~~YV-RWX-049~~	~~ZSH-RWX-049~~
PV-RWX-005	ZSL-RWX-005
PV-RWX-005	ZSH-RWX-005

2.14.4.4.2 The limit switches shall be a separate double pole, double throw, snap acting switch for fully open and for fully closed positions. Seller shall ensure that switch rating is compatible with the associated load.

2.14.4.4.3 Limit switch enclosures shall be NEMA 4 (steel or aluminum construction) per NEMA 250. Valve limit switches field wiring connections shall be 1/2 inch conduit connection. Wiring shall terminate on screw type terminals.

2.14.4.4.4 All threaded connections shall be tapered and in accordance with ANSI/ASME B1.20.1.

2.14.4.4.5 ZSH and ZSL limit switches shall be marked such that the contact which is closed in valve position mid travel is marked "NC" and the common connection is marked "C."

2.14.4.5 Lubricators

2.14.4.5.1 Lubricators and isolating valves shall be furnished with all valves requiring stem lubrication.

2.14.4.5.2 One year's supply of lubricant shall be furnished with each valve requiring lubrication.

2.15 MATERIALS AND EQUIPMENT - PRESSURE RELIEF VALVES

2.15.1 General Requirements

2.15.1.1 The following pressure relief valves shall be assembled, furnished, and installed:

TAG NUMBER	FLUID	TYPE	SET PRESSURE	SIZING BASIS	BODY SIZE
PSV-FWX-370	Water	Pressure Relief	100 psig	Thermal Expansion	3/4 in. MNPT x 1 in. FNPT
PSV-FWX-014-1	Water	Pressure Relief	150 psig	Blocked Discharge	3/4 in. MNPT x 1 in. FNPT
PSV-FWX-014-2	Water	Pressure Relief	150 psig	Blocked Discharge	3/4 in. MNPT x 1 in. FNPT

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

RELEASED HOLD NO. HWVP-FD-436 DCN-0136 ADDED HOLD NO. HWVP-FD-451 DCN-0160

TAG NUMBER	FLUID	RANGE	TRIP POINT	SWITCH
~~PSL-RWX-051~~	~~Water~~	~~20 - 200 psig~~	~~90 psig~~	~~2 SPDT~~
PSL-RWX-007	Water	20 - 200 psig	95 psig	2 SPDT
PSL-FWX-388	Water	20 - 200 psig	95 psig	2 SPDT
PSL-FWX-018	Water	20 - 200 psig	85 psig	2 SPDT
PSL-FWX-019	Water	20 - 200 psig	85 psig	2 SPDT
PSH-FWX-387	Water	20 - 200 psig	110 psig	2 SPDT

2.19.1.2 When two or more components of the same specifications are required, the components shall be identical (same manufacturer and catalog number).

2.19.1.3 The pressure switches shall be United Electric 115-Series or equal.

2.19.1.4 Switches shall be set to open on increasing signal for high, open on decreasing signal for low prior to installation. Provide switches with fixed deadband less than 3% of switch range.

2.20 **OPERATING AND DESIGN CONDITIONS - PRESSURE SWITCHES**

2.20.1 Switch housings shall be designed for NEMA 4 in accordance with NEMA 250.

2.20.2 Process connection shall be 1/2 FNPT and electrical conduit connection shall be 3/4 inch FNPT hub.

2.20.3 Setpoint shall be adjustable by means of an internal screw.

2.20.3.1 All switches shall be set to the actuation point prior to installation.

2.20.3.2 All switches shall have field setpoint adjustment capability over the full range of the switch.

2.20.4 Switch shall be snap acting type. Seller shall ensure that switch rating is compatible with the associated load.

2.20.5 Setpoint repeatability shall be within ±1 percent of full scale throughout entire setpoint range.

2.20.6 Setpoint differential (dead band) shall be fixed and shall not be more than 3 percent of the switch setting.

2.20.7 Proof pressure shall be at least 150 percent of the switch range.

ATTACHMENT D
PROCESS/ALARM SWITCH SETTINGS

REV.	TAG NO.	SERVICE	P&ID LOCATION H-2	ACTUATED BY	SWITCH LOCATION		SWITCH OPENS ON		CONTACTS AT PROCESS NORMAL		ALARM POINT	SWITCH RESET POINT
					CONT PNL	PROC AREA	PROC INCR	PROC DECR	OPEN	CLSD	PROCESS CONDITION	PROCESS
0	LSL-FWX-006A	TK-500-001 TANK	123358 2/3	LE-FWX-006		X		X		X	24'-6"	25'-0"
0	LSL-FWX-006B	TK-500-001 TANK	123358 2/3	LE-FWX-006		X		X		X	24'-6"	25'-0"
0	LSH-FWX-006	TK-500-001 TANK	123358 2/3	LE-FWX-006		X	X			X	31'	30'-6"
0	LSL-DRX-402	SU-530-003 SUMP	123361 7/9	LE-DRX-402		X		X		X	0'-11"	1'-0"
0	LSH-DRX-402	SU-530-003 SUMP	123361 7/9	LE-DRX-402		X	X			X	4'-1"	4'-0"
0	LSHH-DRX-402	SU-530-003 SUMP	123361 7/9	LE-DRX-402		X	X			X	4'-6"	4'-5"
0	LSL-DRX-501	SU-530-004 SUMP	123361 7/9	LE-DRX-501		X		X		X	0'-4"	0'-5"
0	LSH-DRX-501	SU-530-004 SUMP	123361 7/9	LE-DRX-501		X	X			X	1'-8"	1'-7"
0	LSL-DRX-601	SU-530-005 SUMP	123361 7/9	LE-DRX-601		X		X		X	0'-4"	0'-5"
0	LSH-DRX-601	SU-530-005 SUMP	123361 7/9	LE-DRX-601		X	X			X	1'-8"	1'-7"
0	TSH-FWX-004	TK-500-001 TANK	123358 2/ 3	TSHL-FWX-004		X	X			X	50 DEG F	47.7 DEG F
0	TSL-FWX-004	TK-500-001 TANK	123358 2/ 3	TSHL-FWX-004		X		X		X	45 DEG F	47.7 DEG F
0	TSH-FWX-368	HT-500-001 HEATER	123358 2/ 3	TSH-FWX-368		X	X			X	80 DEG F	77.7 DEG F
0	TSLL-FWX-005	TK-500-001 HEATER	123358 2/ 3	TSLL-FWX-005		X		X		X	40 DEG F	42.7 DEG F
0	PSL-RWX- 051	PX-500-001AB PUMP	123358 3/3	PSL-RWX- 051		X		X		X	90 PSIG	92.7 PSIG
0	PSL-RWX- 007	MANIFOLD PRESSURE	123358 1/ 3	PSL-RWX- 007		X		X		X	95 PSIG	98 PSIG
0	PSL-FWX-388	PX-500-004 PUMP	123358 2/ 3	PSL-FWX-388		X		X		X	95 PSIG	98 PSIG
0	PSL-FWX-018	PX-500-002A PUMP	123358 2/ 3	PSL-FWX-018		X		X		X	85 PSIG	87.7 PSIG
0	PSL-FWX-019	PX-500-002B PUMP	123358 2/ 3	PSL-FWX-019		X		X		X	85 PSIG	87.7 PSIG
0	FSL-FWX-369	HT-500-001 HEATER	123358 2/ 3	FSL-FWX-369		X		X		X	5 GPM	5.25 GPM

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U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT
RICHLAND, WASHINGTON
DOE CONTRACT DE-AC06-86RL10838

D=DIRECT
E=ELECTRICAL
P=PROCESS PIPING
C=COMBINATION

INSTALLATION INDEX
SPECIFICATION SECTION 17704, ATTACHMENT B
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REV	BDG	RM	P&ID NUMBER	P&ID SHT	(NEW) INSTRUMENT TAG NUMBER	PNL \ RACK	INSTL TYPE	LOCATION PLAN DWG	INSTALLATION ASSEMBLIES PROCESS	PNEUMATIC	IAS	SUPPORT	ELECTRICAL INSTL ASSY	TEST PRESS	NOTES
1	20	--	123358	02	JIC-FWX-367	LP-500-006	E	121203	---	---	---	---	---	---	2
1	20	--	123358	02	TE-FWX-367	NA	C	121203	---	---	---	---	X11	---	3
1	20	--	123358	02	TIC-FWX-367	LP-500-006	E	121203	---	---	---	---	---	---	2
1	20	--	123358	02	YC-FWX-367	LP-500-006	E	121203	---	---	---	---	---	---	2
1	20	--	123358	02	TAH-FWX-368	LP-500-007	E	121203	---	---	---	---	---	---	---
1	20	--	123358	02	TSH-FWX-368	NA	C	121203	---	---	---	---	X02	---	---
1	20	--	123358	02	TW-FWX-368	NA	P	W/TSH	---	---	---	---	---	---	---
1	20	--	123358	02	FSL-FWX-369	NA	C	121203	---	---	---	---	X02	---	3
1	20	--	123358	02	PSV-FWX-370	NA	P	124033	---	---	---	---	---	---	1
1	20	--	123358	02	TI-FWX-371	NA	D	121203	---	---	---	---	---	---	---
1	20	--	123358	02	TW-FWX-371	NA	D	W/TI	---	---	---	---	---	---	---
1	20	--	123358	02	HS-FWX-383	LP-500-004	E	121203	---	---	---	---	---	---	2
1	20	--	123358	02	YC-FWX-383	LP-500-004	E	121203	---	---	---	---	---	---	2
1	20	--	123358	02	PI-FWX-384	NA	P	121203	121422/3	---	---	---	---	165	---
2	20	--	123358	02	PH-FWX-387	LP-500-004	E	121203	---	---	---	---	---	---	2
1	20	--	123358	02	PSH-FWX-387	NA	C	121203	121422/1	---	---	---	X02	165	3
1	20	--	123358	02	PSL-FWX-388	NA	C	121203	121422/1	---	---	---	X02	165	3
1	20	--	123358	02	PL-FWX-388B	LP-500-004	E	121203	---	---	---	---	---	---	2
2	20	--	123358	02	FE-SWX-711	NA	D	W/FIT	W/FIT	---	---	---	---	---	---
2	20	--	123358	02	FIT-SWX-711	NA	C	121203	121423/1	---	---	121380/1	X03	165	---
2	20	--	123358	02	FI-SWX-711B	LP-500-007	E	121203	---	---	---	---	---	---	---
1	20	--	123358	02	HS-SWX-714	LP-500-007	E	121203	---	---	---	---	---	---	---
1	20	--	123358	02	YC-SWX-714	LP-500-007	E	121203	---	---	---	---	---	---	---
2	20	--	123358	02	YV-SWX-714	NA	P	121203	---	---	---	---	---	---	---
2	20	--	123358	02	YY-SWX-714	NA	C	121203	---	---	121423/4	---	X01	---	---
~~2~~	~~21~~	~~--~~	~~123358~~	~~03~~	~~PI-RWX-039~~	~~NA~~	~~P~~	~~121204~~	~~121422/3~~	~~---~~	~~---~~	~~---~~	~~---~~	~~165~~	~~---~~

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U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT
RICHLAND, WASHINGTON
DOE CONTRACT DE-AC06-86RL10838

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

BASE DOC. NO. B-595-C-A160-17704

D=DIRECT
E=ELECTRICAL
P=PROCESS PIPING
C=COMBINATION

INSTALLATION INDEX
SPECIFICATION SECTION 17704, ATTACHMENT B
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REV	BDG	RM	P&ID NUMBER	P&ID SHT	(NEW) INSTRUMENT TAG NUMBER	PNL \ RACK	INSTL TYPE	LOCATION PLAN DWG	INSTALLATION ASSEMBLIES PROCESS	PNEUMATIC	IAS	SUPPORT	ELECTRICAL INSTL ASSY	TEST PRESS	NOTES
2	21	--	123358	03	PDL-RWX-040	LP-500-008A	E	121204	---	---	---	---	---	---	2
2	21	0	123358	03	PDSH-RWX-040	NA	C	121204	121424/1	---	---	121380/2	X02	165	---
2	21	0	123358	03	PV-RWX-040	NA	C	121201	---	---	---	---	X01	---	---
2	21	--	123358	03	HS-RWX-043-1	LP-500-001A	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	IT-RWX-043-1	LP-500-001A	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	KS-RWX-043-1	LP-500-001A	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	YC-RWX-043-1	LP-500-001A	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	HS-RWX-043-2	LP-500-001B	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	IT-RWX-043-2	LP-500-001B	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	KS-RWX-043-2	LP-500-001B	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	YC-RWX-043-2	LP-500-001B	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	II-RWX-043B-1	LP-500-001A	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	II-RWX-043B-2	LP-500-001B	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	PI-RWX-044-1	NA	P	121204	121422/3	---	---	---	---	165	---
2	21	--	123358	03	PI-RWX-044-2	NA	P	121204	121422/3	---	---	---	---	165	---
2	21	--	123358	03	YC-RWX-049	LP-500-001B	E	121204	---	---	---	---	---	---	2
2	21	--	123358	03	YV-RWX-049	NA	D	121204	---	---	---	---	---	---	---
2	21	--	123358	03	YY-RWX-049	NA	C	121204	---	---	121423/4	---	X01	---	3
2	21	--	123358	03	ZSH-RWX-1049	NA	E	121204	---	---	---	---	X13	---	3
2	21	--	123358	03	ZSL-RWX-049	NA	E	121204	---	---	---	---	W/ZSH	---	3
2	21	--	123358	03	PSL-RWX-051	NA	C	121204	121422/2	---	---	121380/3	X02	165	3
1	21	--	123361	07	LE-DRX-402	NA	C	121204	---	---	---	---	X14	---	---
1	21	--	123361	07	LSH-DRX-402	NA	E	121204	---	---	---	121380/3	W/LE	---	---
1	20	0	123361	07	LSHH-DRX-402	NA	E	121204	---	---	---	W/LSH	W/LE	---	---
1	21	--	123361	07	LSL-DRX-402	NA	E	121204	---	---	---	W/LSH	W/LE	---	---
1	21	--	123361	07	PI-DRX-404-1	NA	P	121204	121422/3	---	---	---	---	110	---

DBASE\A160\I_A160.FRM

RELEASED HOLD NO HWVP-FD-436 DCN-0136
ADDED HOLD NO HWVP-FD-451 DCN-0160

9513358.1177

DCN-0197 PAGE 22
REV. 0

U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT
RICHLAND, WASHINGTON
DOE CONTRACT DE-AC06-86RL10838

D=DIRECT
E=ELECTRICAL
P=PROCESS PIPING
C=COMBINATION

DELETE PER DCN-0197

REV			P&ID		(NEW) INSTRUMENT TAG NUMBER	PNL \ RACK	INSTL TYPE	LOCATION PLAN DWG	INSTALLATION ASSEMBLIES				ELECTRICAL	TEST PRESS	NOTES
	BDG	RM	NUMBER	SHT					PROCESS	PNEUMATIC	IAS	SUPPORT	INSTL ASSY		
1	21	--	123361	07	PI-DRX-404-2	NA	P	121204	121422/3	---	---	---	---	110	---
1	20	0	123361	07	LE-DRX-501	NA	C	121203	---	---	---	---	X14	---	---
1	20	0	123361	07	LSH-DRX-501	NA	E	121203	---	---	---	---	W/LE	---	6
1	20	--	123361	07	LSL-DRX-501	NA	E	121203	---	---	---	---	W/LE	---	6
1	20	0	123361	07	PI-DRX-503	NA	P	121203	121422/3	---	---	---	---	85	---
1	23	0	123361	07	LE-DRX-601	NA	C	121204	---	---	---	---	X14	---	---
1	23	0	123361	07	LSH-DRX-601	NA	E	121204	---	---	---	121380/3	W/LE	---	---
1	23	0	123361	07	LSL-DRX-601	NA	E	121204	---	---	---	W/LSH	W/LE	---	---
1	23	--	123361	07	PI-DRX-603	NA	P	121204	121422/3	---	---	---	---	85	---

9513358.1178

DCN-0197 PAGE 23
REV. 0

SPECIFICATION SECTION B-595-C-A160-17704
ATTACHMENT C

U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT
RICHLAND, WASHINGTON
DOE CONTRACT DE-AC06-86RL10838

ENGINEERING INSTRUMENT INDEX
05/26/93

P&ID NUMBER	P&ID SHT	SFTY CLS	INSTRUMENT TAG NUMBER	SERVICE DESCRIPTION	DCS I\O	PNL \ RACK	BLDG NO	ROOM NO.	SPEC NO	CNST PKG	CWBS	QUAL LEVEL	WAPA	INSTRUMENT TYPE	REV
123358	02	3	TIC-FWX-367	FIRE WATER TANK HEATER	N	LP-500-006	20	--	15505	A160	A160	2	N	ELECT CONTROL	1
123358	02	3	YC-FWX-367	FIRE WATER TANK HEATER	N	LP-500-006	20	--	15505	A160	A160	2	N	PLC SOFT	1
123358	02	3	TAH-FWX-368	FIRE WATER TANK HEATER OUTLET	N	LP-500-007	20	--	17801	A160	A160	2	N	TEMP ALARM HIGH	1
123358	02	3	TSH-FWX-368	FIRE WATER TANK HEATER OUTLET	N	NA	20	--	17801	A160	A160	2	N	TEMP SWITCH HIGH	1
123358	02	3	TW-FWX-368	FIRE WATER TANK HEATER OUTLET	N	NA	20	--	17801	A160	A160	2	N	THERMOWELL	1
123358	02	3	FSL-FWX-369	FIRE WATER TANK HEATER OUTLET	N	NA	20	--	17801	A160	A160	2	N	FLOW SW PADDLE TYPE	1
123358	02	3	PSV-FWX-370	FIRE WATER TANK HEATER OUTLET	N	NA	20	--	17801	A160	A160	2	N	RELIEF VALVE	1
123358	02	3	TI-FWX-371	FIRE WATER TANK HEATER OUTLET	N	NA	20	--	17801	A160	A160	2	N	TEMP. IND.	1
123358	02	3	TW-FWX-371	FIRE WATER TANK HEATER OUTLET	N	NA	20	--	17801	A160	A160	2	N	THERMOWELL	1
123358	02	3	HS-FWX-383	JOCKEY PUMP	N	LP-500-004	20	--	15540	A160	A160	2	N	HAND SWITCH	1
123358	02	3	YC-FWX-383	JOCKEY PUMP DISCHARGE	N	LP-500-004	20	--	15540	A160	A160	2	N	PLC SOFT	1
123358	02	3	PI-FWX-384	JOCKEY PUMP DISCHARGE	N	NA	20	--	17801	A160	A160	2	N	PRESS GAUGE	1
123358	02	3	PH-FWX-387	JOCKEY PUMP DISCHARGE	N	LP-500-004	20	--	15540	A160	A160	2	N	PRESS. ALARM HIGH	2
123358	02	3	PSH-FWX-387	JOCKEY PUMP DISCHARGE	N	NA	20	--	17801	A160	A160	2	N	PRESS SWITCH HIGH	1
123358	02	3	PSL-FWX-388	JOCKEY PUMP DISCHARGE	1	NA	20	--	17801	A160	A160	2	N	PRESS INDICATOR	1
123358	02	3	PL-FWX-388B	JOCKEY PUMP DISCHARGE	N	LP-500-004	20	--	15540	A160	A160	2	N	PRESS ALARM LOW	1
123358	02	3	FE-SWX-711	FIRE WATER STORAGE TANK MAKE UP	N	NA	20	--	17801	A160	A160	2	N	ORIFICE PLATE	2
123358	02	3	FIT-SWX-711	FIRE WATER STORAGE TANK MAKE UP	1	NA	20	--	17801	A160	A160	2	N	DP IND XMTR	2
123358	02	3	FI-SWX-711B	FIRE WATER STORAGE TANK MAKE UP	N	LP-500-007	20	--	17801	A160	A160	2	N	FLOW IND.	2
123358	02	3	HS-SWX-714	FIRE WATER STORAGE TANK MAKE UP	N	LP-500-007	20	--	17801	A160	A160	2	N	HAND SWITCH	1
123358	02	3	YC-SWX-714	FIRE WATER STORAGE TANK MAKE UP	N	LP-500-007	20	--	17801	A160	A160	2	N	PLC SOFT	1
123358	02	3	YV-SWX-714	FIRE WATER STORAGE TANK MAKE UP	N	NA	20	--	17801	A160	A160	2	N	N/F CONTROL VALVE	2
123358	02	3	YY-SWX-714	FIRE WATER STORAGE TANK MAKE UP	N	NA	20	--	17801	A160	A160	2	N	SOL PILOT	2
123358	03	3	PI-RWX-039	RAW WATER BOOSTER PUMP	N	NA	21	--	17801	A160	A160	2	N	PRESS GAUGE	2
123358	03	3	PDL-RWX-040	RAW WATER BOOSTER PUMP STRAINER	N	LP-500-008A	21	--		A160	A160	2	N	DP LIGHT	2
123358	03	3	PDSH-RWX-040	RAW WATER BOOSTER PUMP STRAINER	N	NA	21	0	15440	A160	A160	2	N	DP SWITCH HIGH	2
123358	03	3	PV-RWX-040	RAW WATER BOOSTER DRAIN	N	NA	21	0	15540	A160	A160	2	N	CONTROL VALVE (F)	2

DELETE PER DCN-0197

DCN-0197 PAGE 24 REV. 0

95158.179

dBASE IV\A160\E_A160.FRM

DHOG DOC. NO B-595-C-A160 ... SPECIFICATION B-595-C-A160-17704 ATTACHMENT C

U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT
RICHLAND, WASHINGTON
DOE CONTRACT DE-AC06-86RL10838

ENGINEERING INSTRUMENT 05

RELEASED HOLD NO HWVP-FD-436 DCN-0136

ADDED HOLD NO HWVP-FD-451 DCN-0160

RELEASED HOLD NO. HWVP-FD-451 AND DELETE PER DCN-0197

P&ID NUMBER	SEQ	SFTY CLS	INSTRUMENT TAG NUMBER	SERVICE DESCRIPTION	DCS I/O	PNL \ RACK	BLDG NO	ROOM NO	SPEC NO	CNST PKG	CWBS	QUAL LEVEL	WAPA	INSTRUMENT TYPE
123358	03	3	HS-RWX-043-1	RAW WATER BOOSTER PUMP A	N	LP-500-001A	21	--	15540	A160	A160	2	N	HAND SWITCH
123358	03	3	IT-RWX-043-1	RAW WATER BOOSTER PUMP A MOTOR	1	LP-500-001A	21	--	15540	A160	A160	2	N	CURRENT XMTR
123358	03	3	KS-RWX-043-1	RAW WATER BOOSTER PUMP A	N	LP-500-001A	21	--	15540	A160	A160	2	N	TIMING RELAY
123358	03	3	YC-RWX-043-1	RAW WATER BOOSTER PUMP A	N	LP-500-001A	21	--	15540	A160	A160	2	N	LOGIC BLOCK
123358	03	3	HS-RWX-043-2	RAW WATER BOOSTER PUMP B	N	LP-500-001B	21	--	15540	A160	A160	2	N	HAND SWITCH
123358	03	3	IT-RWX-043-2	RAW WATER BOOSTER PUMP B MOTOR	1	LP-500-001B	21	--	15540	A160	A160	2	N	CURRENT XMTR
123358	03	3	KS-RWX-043-2	RAW WATER BOOSTER PUMP B	N	LP-500-001B	21	--	15540	A160	A160	2	N	TIMING RELAY
123358	03	3	YC-RWX-043-2	RAW WATER BOOSTER PUMP B	N	LP-500-001B	21	--	15540	A160	A160	2	N	LOGIC BLOCK
123358	03	3	II-RWX-043B-1	RAW WATER BOOSTER PUMP A MOTOR	N	LP-500-001A	21	--	15540	A160	A160	2	N	AMMETER
123358	03	3	II-RWX-043B-2	RAW WATER BOOSTER PUMP B MOTOR	N	LP-500-001B	21	--	15540	A160	A160	2	N	AMMETER
123358	03	3	PI-RWX-044-1	RAW WATER BOOSTER PUMP A DISCHARGE	N	NA	21	--	17801	A160	A160	2	N	PRESS GAUGE
123358	03	3	PI-RWX-044-2	RAW WATER BOOSTER PUMP B DISCHARGE	N	NA	21	--	17801	A160	A160	2	N	PRESS GAUGE
123358	03	3	YC-RWX-049	RAW WATER BOOSTER PUMP DISCHARGE VALVE	N	LP-500-001B	21	--	15540	A160	A160	2	N	LOGIC BLOCK
123358	03	3	YV-RWX-049	RAW WATER BOOSTER PUMP DISCHARGE VALVE	N	NA	21	--	17801	A160	A160	2	N	N/F BUTTERFLY VLV
123358	03	3	YY-RWX-049	RAW WATER BOOSTER PUMP DISCHARGE VALVE	N	NA	21	--	17801	A160	A160	2	N	SOL PILOT
123358	03	3	ZSH-RWX-049	RAW WATER BOOSTER PUMP DISCHARGE VALVE	N	NA	21	--	17801	A160	A160	2	N	VLV LIMIT SWITCH
123358	03	3	ZSL-RWX-049	RAW WATER BOOSTER PUMP DISCHARGE VALVE	N	NA	21	--	17801	A160	A160	2	N	VLV LIMIT SWITCH
123358	03	3	PSL-RWX-051	RAW WATER BOOSTER PUMP DISCHARGE HEADER	N	NA	21	--	17801	A160	A160	2	N	PRESS SWITCH
123361	07	3	LE-DRX-402	EFFLUENT DISCHARGE COLLECTION SUMP	N	NA	21	--	17801	A160	A160	2	N	CAP LEVEL PROBE
123361	07	3	LSH-DRX-402	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	21	--	17801	A160	A160	2	N	CAP LEVEL SWITCH
123361	07	3	LSHH-DRX-402	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	20	0	17801	A160	A160	2	N	CAP LEVEL SWITCH
123361	07	3	LSL-DRX-402	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	21	--	17801	A160	A160	2	N	CAP LEVEL SWITCH
123361	07	3	PI-DRX-404-1	EFFLUENT DISCHARGE COLLECTION SUMP	N	NA	21	--	17801	A160	A160	2	N	PRESS GAUGE
123361	07	3	PI-DRX-404-2	EFFLUENT DISCHARGE COLLECTION SUMP	N	NA	21	--	17801	A160	A160	2	N	PRESS GAUGE
123361	07	3	LE-DRX-501	EFFLUENT DISCHARGE COLLECTION SUMP	N	NA	20	0	17801	A160	A160	2	N	CAP LEVEL PROB
123361	07	3	LSH-DRX-501	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	20	0	17801	A160	A160	2	N	CAP LEVEL SWITCH
123361	07	3	LSL-DRX-501	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	20	--	17801	A160	A160	2	N	CAP LEVEL SWITCH
~~BASE IV\A160\E-A160.FRM~~														
123359	01	3	FQI-SWX-002	SANITARY WATER SUPPLY	N	NA	21	--	17801	A160	A160	2	N	FLOW TOTALIZER
123359	01	3	FQI-SWX-013	SANITARY WATER SUPPLY	N	NA	23	--	17801	A160	A160	2	N	FLOW TOTALIZER

DELETE PER DCN-0197

DCN-0197 REV.0

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SPECIFICATION SECTION B-595-C-A160-17704
ATTACHMENT C

U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT
RICHLAND, WASHINGTON
DOE CONTRACT DE-AC06-86RL10838

ENGINEERING INSTRUMENT INDEX
05/26/93

P&ID NUMBER	P&ID SHT	SFTY CLS	INSTRUMENT TAG NUMBER	SERVICE DESCRIPTION	DCS I\O	PNL \ RACK	BLDG NO	ROOM NO.	SPEC NO	CNST PKG	CWBS	QUAL LEVEL	WAPA	INSTRUMENT TYPE	REV
123361	07	3	PI-DRX-503	EFFLUENT DISCHARGE COLLECTION SUMP PUMP	N	NA	20	0	17801	A160	A160	2	N	PRESS GAUGE	1
123361	07	3	LE-DRX-601	EFFLUENT DISCHARGE COLLECTION SUMP	N	NA	23	0	17801	A160	A160	2	N	CAP LEVEL PROB	1
123361	07	3	LSH-DRX-601	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	23	0	17801	A160	A160	2	N	CAP LEVEL SWITCH	1
123361	07	3	LSL-DRX-601	EFFLUENT DISCHARGE COLLECTION SUMP	1	NA	23	0	17801	A160	A160	2	N	CAP LEVEL SWITCH	1
123361	07	3	PI-DRX-603	EFFLUENT DISCHARGE COLLECTION SUMP PUMP	N	NA	23	--	17801	A160	A160	2	N	PRESS GAUGE	1

DELETE PER DCN-0197

9413358.1181

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REV.0

9513358.1182

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV 0	DISCIPLINE STRUCTURAL	PKG. NO. A160	PAGE 27

PREPARED BY: D. SAYLOR Date: 7/12/94

DISCIPLINE ENGINEER: D. SAYLOR Date: 7/12/94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-118007	1	2	STRUCTURAL FW & RWX BLDGS FOUNDATION PLANS	N	DELETE RWX PUMP HOUSE FOUNDATION PLAN DELETE NOTE 7
H-2-118010	1	2	STRUCTURAL RWX PUMP HOUSE STEEL PLAN & ELEVATION	N	DELETE DRAWING IN ITS ENTIRETY
H-2-118013	1	2	STRUCTURAL TK-500-001 FDN DETAILS & BLDG FLANGE BOX DETAILS	N	REVISE TITLE OF PLAN FB-21-2 & FB-23-1 TO PLAN FB-23-1 DELETE FB-21-1 AND 2 FROM PRECAST FLANGE BOX SCHEDULE DELETE PLAN FB-21-1
H-2-118014	1	2	STRUCTURAL FW & RWX BLDGS EQUIPMENT ANCHOR DETAILS	N	DELETE PUMP NO. PX-500-001A & B FROM PUMP FOUNDATION SCHEDULE DELETE SUPPORT NO. EPS 2 & 9 FROM ELECTRICAL PANEL SUPPORT SCHEDULE

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1183

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0197	REV	DISCIPLINE	PKG. NO.	PAGE
	0	STRUCTURAL	A160	28

PREPARED BY: D. SAYLOR Date: 7/12/94

DISCIPLINE ENGINEER: D. SAYLOR Date: 7/12/94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-118014	2	1	STRUCTURAL FW & RWX BLDGS EQUIPMENT ANCHOR DETAILS	N	DELETE STAINER SUPPORT DETAILS RWX PUMP HOUSE DELETE ELECTRICAL PANEL SUPPORT LP-500-001A & B
H-2-118019	1	1	STRUCTURAL RWX PUMP HOUSE DETAILS	N	DELETE THIS DRAWING IN ITS ENTIRETY
H-2-118020	1	1	STRUCTURAL CATH PROT RECT PAD & SU-530-004 & 005 DETAILS	N	REVISE DETAIL NO. 6 TO REFLECT A 1/4" RAISED CHECKER PLATE AND DELETE THE HOLES FOR PX-530-016, LE-DRX-601 AND THE SUMP VENT REVISE DETAIL NO. 4 TO INDICATE THAT THE 1/2" DIA X 1" LONG FLAT HEAD SLOTTED MACHINE SCREWS ARE "REQUIRED AT FW PUMP HOUSE ONLY"

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1184

FLUOR DANIEL US DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT **DESIGN CHANGE NOTICE**	DCN - 0197	REV 0	DISCIPLINE PIPING	PKG. NO. A160	PAGE 29
	PREPARED BY: R. A. CELAYA			Date: 7/20/94	
	DISCIPLINE ENGINEER: Jay Thompson			Date: 7/20/94	

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-124030	1	3	PIPING RWX PUMP HOUSE/SHELTER PLAN	N	DELETE THE RWX PUMP HOUSE BLDG. NO. 21 & ALL ITS PIPING. AT DET. 1 DELETE REFERENCES: DRX-4"-530-113-R @ SU-530-003, DRX-4"-530-130-R @ SU-530-003 & SU-530-003 WALL (SEE DWG. H-2-118019 FOR DETAILS). AT DETAIL 2 DELETE REF: EL 705'-4 3/4" @ BLDG. 21. AT THE RWX MANIFOLD BLDG. NO. 23 DELETE SUMP PUMP PX-530-016, INST. LE-DRX-601 & LINES DRX-4"-530-010-G & DRX-4"-530-035-G. RELEASE HOLD NO. HWVP-FD-436 PLACED BY DCN-0136.
H-2-124035	1	2	PIPING RWX PUMP HOUSE/SHELTER SECTS.	N	DELETE SECTIONS A, B, C, D & E. AT DETAIL F DELETE SUMP PUMP PX-530-016, INSTR. LE-DRX-601, LINES DRX-4"-530-010-G-ET(W) AND DRX-4"-530-035-G. RELEASED HOLD NO. HWVP-FD-436 PLACED BY DCN-0136.

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1185

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN -	REV	DISCIPLINE	PKG. NO.	PAGE
0197	0	PIPING	A160	30

PREPARED BY: R. A. CELAYA Date: 7/20/94

DISCIPLINE ENGINEER: Jay Thompson Date: 7/20/94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-126146	1	1	PIPING ISOMETRIC	N	DELETE ENTIRE ISOMETRIC & RELEASE HOLD NO. HWVP-FD-0436 PLACED BY DCN-0136
	2	1			
	3	1			
	4	1			
	5	1			
	7	1			DELET ENTIRE ISOMETRIC
	8	1			
	9	0			
	10	0			
	11	0			
	12	0			
	13	0			
H-2-126148	10	0			
	11	0			
	12	0			
H-2-126145	5	0		Y	DELETE PX-530-016 & RELATED PIPING. ADDED A 4" BLIND FLANGE.

SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE

9513358.1186

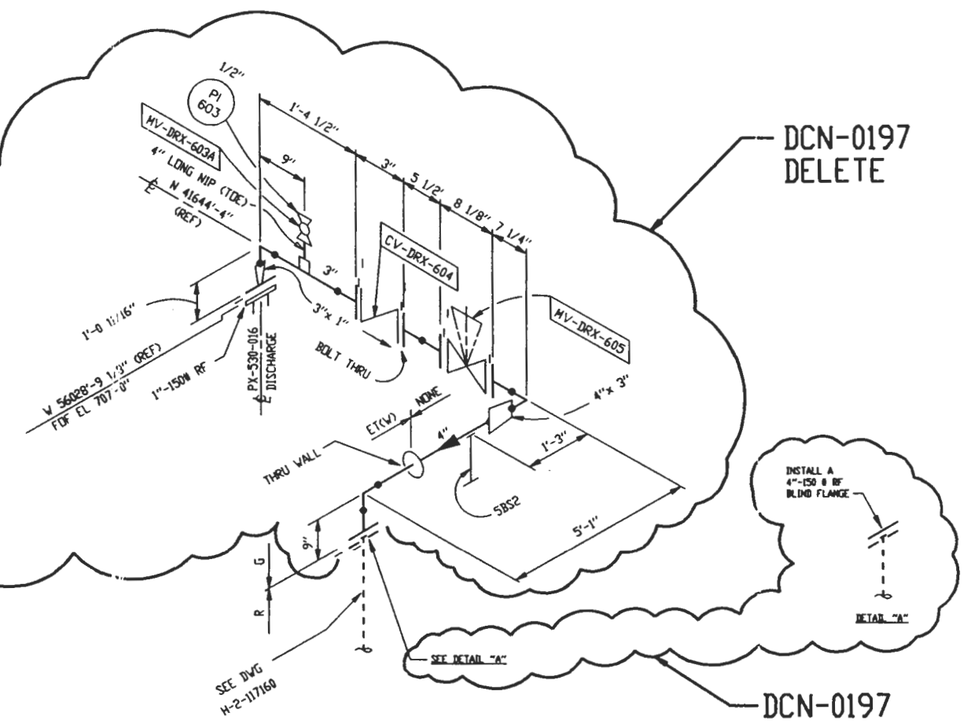
FLUOR DANIEL

BILL OF MATERIAL FOR REFERENCE ONLY

BILL OF MATERIAL	DATE	CONTRACT	LINE NUMBER	CLASS	SHEET	REV
	07/22/92	8457	530-010	G	1	0

REV.	ITEM CODE	QUANTITY	SIZE		DESCRIPTION
					**** ASSEMBLY MATERIAL ****
0	5356515	1		03	PIPE STD WT ERW STL A53-B
0	5356515	3		04	PIPE STD WT ERW STL A53-B
0	5374114	2		03	ELL 90 DEG LR STD WT STL A234 WPB
0	5374114	1		04	ELL 90 DEG LR STD WT STL A234 WPB
0	5374125	1	04	03	REDUCER CONC STD WT STL A234 WPB
0	5554395	4		03	FLG WN CL 150 RF STL STD BORE A105
0	5554395	1		04	FLG WN CL 150 RF STL STD BORE A105
0	5601738	1		01	FLG SW CL 150 RF STL SCH 80 A105
0	5280796	1		03	CHECK CL 150 RF STL, 316SS TRIM WAF-TYPE
0	5669761	1		01	GASKET CL 150 NON-ASB RING PRT AGT 1/16"
0	5669761	4		03	GASKET CL 150 NON-ASB RING PRT AGT 1/16"
	5675648	8	5/8	03	STUD-BOLT A193 GR B7 W/A194 GR 2H NUTS
0	5853421	1		03	GATE CL 150 RF OS&Y, STL, UL
0	5478109	1		1/2	COUPLING CL 3000 SW STL A105
0	5543611	1	03	01	SWAGE CONC SCH 80 STL A234 GR WPB BBE
0	5840961	1	04	1/2	NIPPLE SCH 80 STL ERW A53-B TOE
0	5858822	1		1/2	BALL 600 PSI WOG SCRD BRONZE, HDL OPR
0	5675648	4	5/8	06 3/4	STUD-BOLT A193 GR B7 W/A194 GR 2H NUTS
0	5BS2	1			BASE SUPPORT
0	5615476	1		04	FLG BLD CL 150 RF STL A105

DCN-0197



NOTES

1. FOR PIPING ISOMETRIC INDEX AND NOTES SEE DRAWING H-2-126144.
2. INSTRUMENT TAG NUMBER IS PREFIXED WITH DRX SERVICE IDENTIFICATION.
3. ADDED PER CR-HVVP-656 AND OTHER MINOR CHANGES, APPROVED FOR CONSTRUCTION.

SAFETY CLASS 3

REV.	TYPE	BY	DATE	CHK'D	APPV'D	MAT'L	STRESS
0	SEE NOTE 3	JED	8-5-92	RAC	JCD		JGILL

INSULATION	IH	IS	IC	IA	NONE
TOTAL ISO					
PARTIAL ISO	X				

HEAT TRACING REQUIREMENTS	YES	NO
TRACING MEDIUM		X
TRACER: QTY ___ SIZE ___		X
ELECTRIC TRACE	X	
HEAT TRANSFER CEMENT REQUIRED		X

FABRICATION SPECIFICATION: B-595-C-A160 SECTION 15061

CONDITION	PRESS.(PSIG)	TEMP.(°F)	SERVICE
DESIGN	100	120	CLEAN DRAIN
OPERATING	0	AMB	VAPOR / LIQUID X

REFERENCE PLAN DWG: H-2-124030
REFERENCE P&ID: H-2-123361-7
SECTION: A/3

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE-AC06-86RL 10838

CADFILE	CADCODE	PROJECT TITLE
B126145E	2B:IBM:ACD2:10.C2:SN	HANFORD WASTE VITRIFICATION PLANT

DRAWN BY: J. E. DUHON — DATE: 4-22-92
CLASSIFICATION: NONE — BY: NOT REQUIRED

PROJECT	FLUOR CONTRACT NO.	CWBS NO.
B-595	8457	A160
SCALE: NONE	BUILDING NO.: 23	INDEX NO.:

LINE NUMBER AND CLASS: 530-010-G — SHEET 1 OF 1

DRAWING NUMBER	SHEET	OF	REV.
H-2-126145	5		0

160 H-2-126145 0 S AFC

DISTRIBUTION CODE: 504

ACAD D.P.L. 7-22-92

FLUOR DANIEL — U.S. DEPARTMENT OF ENERGY, HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DESCRIPTION OF CHANGE

DELETED PX-530-016
AND RELATED PIPING. ADDED
A 4" BLIND FLANGE AS SHOWN.

BASE DOC. NO.	H-2-126145
SHT/PG.	5
REV.	0
CR NO.	1111
DISCIPLINE:	PIPING

PREPARED BY: R. A. Calaya — DATE: 7/20/94
DISCIPLINE ENGINEER: Jay Thompson — DATE: 7/20/94

DCN	REV.	PAGE
DCN - 0197	0	31

CADFILE: DCN0197A ACAD RC 7/19/94