START

0032659

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: MAY 13, 1993

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

Transmittal No.: WDOE-422

Dear Mr. Grantham:

TRANSMITTAL

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

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

NUMBER	REV	DATE	TITLE
SEE TRANSMITTAL ATTACHMENT			HVAC Process & Instrument Diagram Drawings BOOK 2A
CONTROLLED MANUALS 25 & 26			PLEASE REVOVE OLD REVISIONS AND TABLE OF CONTENTS FROM YOUR HVAC P&ID MANUAL AND REPLACE WITH THE ATTACHED REVISIONS. RECYCLE PREVIOUS REVISION.

REFERENCE: FRP-930, FUP-457

Distribution:
R. L. Long: DOE-RL, w/1 cc#24
TWP/AME Corresp Cntrl Cntr, MSIN A5-10
(HVAC CONTROLLED MANUAL),w/1
P. Felise, WHC-RL (MSIN G6-16) w/0
Environmental Data Management Center
(MSIN H4-44) w/1 cc#31
D. Duncan, US EPA, Region X w/0

Very truly yours,

Roselie Cadenas for/
R. S. Poulter
Project Director

RSP:REF:dw

DEC 1993
RECEIVED
EDMC

9413092.0417

TRANSMITTAL ATTACHMENT

DRAWING NUMBER	SHT NO.	REV	DATE	DRAWING TITLE
H-2-129803	01	2	05/10/93	SYSTEM 05 VITRIFICATION BUILDING ZONE I ST/ET & CDC AREAS
H-2-129805	01	2	05/10/93	SYSTEM 05 VITRIFICATION BUILDING ZONE I CANYON, RW & CDMC AREAS
H-2-129806	01	2	05/10/93	SYSTEM 05 VITRIFICATION BUILDING ZONE I REDC, HEME, RLST & CPC AREAS
H-2-129806	02	2	05/10/93	SYSTEM 05 VITRIFICATION BUILDING ZONE I REDC, HEME, MC, RLST & CPC AREAS

9413092.0418

HVAC PIPING AND INSTRUMENT DIAGRAMS
VOLUME 2A
TABLE OF CONTENTS

NEW ISSUE	DRAWING NO.	SH NO	REV	DRAWING TITLE	CWBS NO
** VOLUME NUMBER: 2A					
	H-2-129582	01	0	HVAC FCD SYST 05 VB ZONE I ST/ET & CDC	3228
	H-2-129584	01	0	HVAC FCD SYST 05 VB ZONE I RW & CDMC	3228
	H-2-129585	02	0	HVAC FCD SYST 05 VB ZONE I REDC & SELC	3228
	H-2-129585	03	0	HVAC FCD SYST 05 VB ZONE I HEME & MC	3228
	H-2-129585	04	0	HVAC FCD SYST 05 VB ZONE I CPC	3228
	H-2-129730	01	0	SYST 05 CSB COMPOSITE	3229
	H-2-129731	01	0	SYST 05 CSB OFFICE AREAS	3229
	H-2-129731	02	0	SYST 05 CSB OFFICE AREAS	3229
	H-2-129731	03	0	SYST 05 CSB OFFICE AREAS	3229
	H-2-129732	01	02	SYSTEM 05 CANISTER STORAGE SYSTEM HVAC EQUIPMENT SUPPLY SYSTEM	3229
	H-2-129732	02	02	SYSTEM 05 CANISTER STORAGE BUILDING HVAC EQUIPMENT SUPPLY SYSTEM	3229
	H-2-129733	01	02	SYSTEM 05 CANISTER STORAGE BUILDING MECHANICAL ROOM AREAS	3229
	H-2-129733	02	02	SYSTEM 05 CANISTER STORAGE BUILDING MECHANICAL ROOM AREAS	3229
	H-2-129734	01	0	SYST 05 CSB MECH RM & OPER AREA	3229
	H-2-129734	02	0	SYST 05 CSB MECH RM & OPER AREA	3229
	H-2-129734	03	0	SYST 05 CSB MECH RM & OPER AREA	3229
	H-2-129735	01	02	SYSTEM 05 CANISTER STORAGE BUILDING ZONE II VENTILALATION SYSTEM	3229
	H-2-129735	02		NOT USED	
	H-2-129735	03		NOT USED	
	H-2-129735	04		NOT USED	
	H-2-129736	01	02	SYSTEM 05 ZONE II HVAC EQUIPMENT CANISTER STORAGE BUILDING EXHAUST SYSTEM	3229
	H-2-129736	02	02	SYSTEM 05 CANISTER STORAGE BUILDING ZONE II HVAC EQUIPMENT EXHAUST SYSTEM	3229
	H-2-129737	01	02	SYSTEM 05 CANISTER STORAGE BUILDING ZONE II EXHAUST STACK	3229
	H-2-129737	02	02	SYSTEM 05 CANISTER STORAGE BUILDING ZONE II EXHAUST STACK	3229
	H-2-129738	01	0	SYST 05 CSB VAULT & STACK	3229
	H-2-129760	01	00	SYSTEM 05-WHT BLDG ZONE 111A COMPOSITE	3228
	H-2-129761	02	00	SYSTEM 05-WHT BLDG ZONE 111A OSA SUPPLY	XXXX
	H-2-129762	01	00	SYSTEM 05-WHT BLDG ZONE 111A SUPPLY	3228

HVAC PIPING AND INSTRUMENT DIAGRAMS
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NEW ISSUE	DRAWING NO.	SH NO	REV	DRAWING TITLE	CWBS NO
	H-2-129762	02	00	SYSTEM 05-WHT BLDG ZONE 111A SUPPLY	3228
	H-2-129763	01	00	SYSTEM 05-WHT BLDG ZONE 111A EXH PLENUMS	3228
	H-2-129764	01	00	SYSTEM 05-WHT BLDG ZONE 111A EXH FAN	3228
	H-2-129764	02	00	SYSTEM 05-WHT BLDG ZONE 111A EXH FAN	3228
	H-2-129800	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I COMPOSITE	3228
	H-2-129801	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II & III COMPOSITE	3228
	H-2-129802	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I SUPPLY	3228
	H-2-129802	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I SUPPLY	3228
*	H-2-129803	01	2	SYSTEM 05 VITRIFICATION BUILDING ZONE I ST/ET & CDC AREAS	3228
	H-2-129804	01	0	SYSTEM 05 VITRIFICATION BUILDING ZONE I CANYON, CBMC & CMA AREAS	3228
*	H-2-129805	01	2	SYSTEM 05 VITRIFICATION BUILDING ZONE I CANYON, RW & CDMC AREAS	3228
*	H-2-129806	01	2	SYSTEM 05 VITRIFICATION BUILDING ZONE I REDC, HEME, RLST & CPC AREAS	3228
*	H-2-129806	02	2	SYSTEM 05 VITRIFICATION BUILDING ZONE I REDC, HEME, MC, RLST & CPC AREAS	3228
	H-2-129807	01	1	SYSYEM 05 VITRIFICATION ZONE I SAND FILTER & EMERGENCY BYPASS FILTER PLENUM	3228
	H-2-129807	02	1	SYSTEM 05 VITRIFICATION ZONE I SAND FILTER & EMERGENCY BYPASS FILTER PLENUM	3228
	H-2-129807	03	1	SYSTEM 05 VITRIFICATION ZONE I SAND FILTER & EMERGENCY BYPASS FILTER PLENUM	3228
	H-2-129808	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FILTER PLENUM	3228
	H-2-129808	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FILTER PLENUMS	3228
	H-2-129808	03	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FILTER PLENUMS	3228
	H-2-129809	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FANS	3228
	H-2-129809	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FANS	3228
	H-2-129809	03	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FANS	3228

9413092.0420

HVAC PIPING AND INSTRUMENT DIAGRAMS
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NEW ISSUE	DRAWING NO.	SH NO	REV	DRAWING TITLE	CWBS NO
	H-2-129809	04	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I EXHAUST FANS	3228
	H-2-129810	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III SUPPLY	3228
	H-2-129810	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III SUPPLY	3228
	H-2-129811	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III AREAS	3228
	H-2-129811	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III AREAS	3228
	H-2-129811	03	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III AREAS	3228
	H-2-129811	04	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III AREAS	3228
	H-2-129811	05	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III AREAS	3228
	H-2-129812	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	03	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	04	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	05	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	06	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	07	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129812	08	1	SYSTEM 05 VITRIFICATION BUILDING ZONE III EXHAUST AND ZONE II SUPPLY	3228
	H-2-129813	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	03	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	04	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	05	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	06	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228

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	H-2-129813	07	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	08	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	09	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129813	10	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129814	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129814	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129815	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129815	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II AREAS	3228
	H-2-129816	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	03	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	04	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	05	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	06	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	07	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129816	08	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST PLENUM	3228
	H-2-129817	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST FANS	3228
	H-2-129817	02	1	SYSTEM 05 VITRIFICATION BUILDING ZONE II EXHAUST FANS	3228
	H-2-129818	01	0	SYSTEM 05 TRAIN A ZONE I EXHAUST STACK	3229
	H-2-129818	02	0	SYSTEM 05 TRAIN B ZONE I EXHAUST STACK	3229
	H-2-129819	01	1	SYSTEM 05 VITRIFICATION BUILDING ZONE I ANALYTICAL CELLS & SAMPLE CELL SUPPLY FANS	3228
	H-2-129820	01	0	SYSTEM 05 VITRIFICATION BUILDING ZONE I ANALYTICAL CELLS & SAMPLE CELL FILTER PLENUM	3228

9413092.0422

HVAC PIPING AND INSTRUMENT DIAGRAMS
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NEW ISSUE	DRAWING NO.	SH NO	REV	DRAWING TITLE	CWBS NO
	H-2-129821	01	0	SYSTEM 05 VITRIFICATION BUILDING ZONE I ANALYTICAL CELLS AND SAMPLE CELL	3228
	H-2-129822	01	1	SYSTEM 05 REGULATED ENTRANCE BUILDING ZONE II / III AREAS	3228
	H-2-129822	02	1	SYSTEM 05 REGULATED ENTRANCE BUILDING ZONE II / III AREAS	3228

RELEASED FOR PROJECT BASELINE CONTROL

MAY 10 1993

9413092.0424

EH-05A-001
ELECTRIC DUCT HEATER
DESIGN CAPACITY: 135 KW

EH-05A-002
ELECTRIC DUCT HEATER
DESIGN CAPACITY: 725 KW

VOID THIS SHEET

DCS

FROM ZONE 1 SUPPLY AIR PLENUM H-2-129802-1 C2

3500 SCFM

20000 SCFM

ID-05A-001

ID-05A-002

FD-05A-001A

FD-05A-002A

FD-05A-001B

FD-05A-002B

DN-05A-001

DN-05A-002

BD-05A-001

BD-05A-002

SMEAR TEST/ EXIT TUNNEL 086

SUPPLY TUNNEL 034

CANISTER DECON CELL (CDC) 036

HC-CDC TRANSFER TUNNEL 044

3500 SCFM

1300 SCFM

22200 SCFM (THRU COVER BLOCKS)

CDC EXHAUST TO CANYON H-2-129804-1 F8

TO HELTER CELL H-2-129806-1 B8

ARP HEADER

SAFETY PANEL LP-120-003

SAFETY PANEL LP-120-004

GENERAL NOTES:

A. THREE DIGIT INSTRUMENT TAG NUMBERS ARE PREFIXED WITH 05A UNLESS A SIX DIGIT NUMBER IS SHOWN TO INDICATE ANOTHER SYSTEM

B. REFER TO DRAWING H-2-123001 "LEGEND OF SYMBOLOGY FOR PROCESS FLOW AND PIPING AND INSTRUMENT DIAGRAMS" FOR AN EXPLANATION OF SYMBOLS AND ABBREVIATIONS

C. ALL WALL PENETRATION BLOCK VALVES ARE MINIMUM DISTANCE FROM THE WALL

D. FIRE DAMPER LOCATIONS AND REQUIREMENTS WILL BE VERIFIED IN DETAILED DESIGN

NOTES:

1. THE MULTI-STEP ELECTRIC HEATER POWER CONTROLLER SYSTEM INCLUDES A MULTI-STAGE STEP CONTROLLER AND A MODULATING SILICON CONTROLLED RECTIFIER (SCR) TO PROVIDE MODULATING CONTROL BETWEEN EACH SUCCESSIVE STAGE. LOW AIR FLOW AND HIGH HEATER TEMPERATURE CUTOUTS ARE ALSO INCLUDED

ASSUMPTION NOTES:

A. THIS DRAWING IS AFFECTED BY CR-0606 (HVAC OPTIMIZATION) AND WILL BE REVISED TO SHOW THE TWO SUPPLY AIR STREAMS COMBINED FROM THE SUPPLY AIR PLENUM ON THE 4TH FLOOR USING ONE VERTICAL DROP TO THE TUNNEL. REVISION SHALL BE COORDINATED WITH DESIGN LAYOUT DRAWINGS

SAFETY CLASS 1 AS NOTED

REV	DATE	REVISION DESCRIPTION	APPROVAL INITIALS
2	5/14/93	SUPERSEDED BY H-2-129802-1 PER CR-HVVP-0853. VOID THIS SHEET	RGG, RB, EF, MJP
1	11/10/91	ADDED ASSUMPTION NOTE A PER CR-HVVP-0574	REF, SA, RT, SA; CDG, AS, DAM, RMC
0	3/30/91	RELEASED FOR PROJECT BASELINE	REF, MGP, RT, MGP
		CONTROL PER CR HVVP-0480	JRS, FB, DPC, RMC
01	12/22/90	ISSUED FOR FLUOR DANIEL	SA, TC, RT, MM
		CONTROL PER CR HVVP-0446-2	JS, FB, DC, RG
00	9/24/90	RELEASED FOR DETAILED DESIGN	SA, TC, RT, MM
			JS, FB, DC, RG

ENGINEERING RELEASE
REV. ____ DATE ____
CRD ____

SIGNATURE	DATE
R N GIBBONS	9/21/90
D P CHAVLA	9/21/90
F G SPEOKS	9/21/90
J L SHETS	9/19/90
H G MERCADO	9/19/90
H D TAGNEY	9/19/90
T Y CHEN	9/17/90
S ANVAR	9/19/90
C F DIMOND	9/18/90

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10838

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

HVAC FLOW & CONTROL DIAGRAM
SYSTEM 05
VITRIFICATION BUILDING ZONE 1
ST/ET & CDC AREAS

HANFORD WASTE VITRIFICATION PLANT

PROJECT 3-595 | FLUOR DANIEL NO. 8457 | JOB NO. 3220

SCALE NONE | SIZE NOT REQ'D | DRAWING NO. H-2-129803 | SHEET 1 | OF 1 | REV. 2

AA483312/01
05-10-93
SG

RELEASED . JR PROJECT
BASELINE CONTROL

MAY 1 0 1993

9413082.0425

EH-05A-004
ELECTRIC DUCT HEATER
DESIGN 453 KW

EH-05A-005
ELECTRIC DUCT HEATER
DESIGN 68 KW

VOID THIS SHEET

DCS

FROM PT-313 H-2-129806-2 F8

EH-05A-004
FROM ZONE I SUPPLY AIR PLENUM H-2-129802-2 B2
ID-05A-005
6400 SCFM
DN-05A-005
FD-05A-005A
BD-05A-005A
FD-05A-005B
SUPPLY PLENUM
RAILROAD WELL (RW) 067
RAILROAD WASHDOWN 094
3700 SCFM
3700 SCFM
INFILTRATION 1000 SCFM
BD-05A-005B
BD-05A-005C
LAYDOWN AREA 050
TO ZONE I EXHAUST TUNNEL H-2-129806-2 E8
1200 SCFM
ORIFICE
TO ZONE I EXHAUST TUNNEL H-2-129806-2 E8
1200 SCFM
ORIFICE
PROCESS CANYON 222

EH-05A-005
FROM ZONE I SUPPLY AIR PLENUM H-2-129802-2 B2
ID-05A-006
15100 SCFM
DN-05A-006
FD-05A-006A
BD-05A-006
FD-05A-006B
SUPPLY TUNNEL 036
CONTACT DECON. & MAINT. CELL (CDMC) 066
15100 SCFM (THRU COVER BLOCKS)
TO CPC H-2-129806-2 D8
35000 SCFM (THRU COVER BLOCKS)

FROM ZONE I SUPPLY AIR PLENUM H-2-129802-2 B2
ID-05A-007
FD-05A-007A
DN-05A-007
BD-05A-007
12800 SCFM
TO BLST H-2-129806-2 A8

SAFETY PANEL LP-120-003
SAFETY PANEL LP-120-004

GENERAL NOTES:

A. THREE DIGIT INSTRUMENT TAG NUMBERS ARE PREFIXED WITH 05A UNLESS A SIX DIGIT NUMBER IS SHOWN TO INDICATE ANOTHER SYSTEM

B. REFER TO DRAWING H-2-123001 "LEGEND OF SYMBOLOGY FOR PROCESS FLOW AND PIPING AND INSTRUMENT DIAGRAMS" FOR AN EXPLANATION OF SYMBOLS AND ABBREVIATIONS.

C. ALL WALL PENETRATION BLOCK VALVES ARE MINIMUM DISTANCE FROM THE WALL.

D. FIRE DAMPER LOCATIONS AND REQUIREMENTS WILL BE VERIFIED IN DETAILED DESIGN

NOTES:

1. THE MULTI-STEP ELECTRIC HEATER POWER CONTROLLER SYSTEM INCLUDES A MULTI-STAGE STEP CONTROLLER AND A MODULATING SILICON CONTROLLED RECTIFIER (SCR) TO PROVIDE MODULATING CONTROL BETWEEN EACH SUCCESSIVE STAGE. LOW AIR FLOW AND HIGH HEATER TEMPERATURE CUTOUTS ARE ALSO INCLUDED

ASSUMPTION NOTES:

A. THIS DRAWING IS AFFECTED BY CR-0518 (DELETION OF RLST) ADD CLOUD TO RLST INTERFACE NOTATION. THE RLST WILL BE DELETED. HOWEVER, ADDITIONAL EQUIPMENT MAY BE PLACED IN THE SPACE WHERE THE RLST WAS LOCATED

SAFETY CLASS 1 AS NOTED

REV	DATE	REVISION DESCRIPTION	DRAWN	CHK	APPROVED	APPROVAL DATE
2	7/14/93	SUPERSEDED BY H-2-129584-1 PER CR-HVVP-0853. VOID THIS SHEET	[illegible]	[illegible]	[illegible]	[illegible]
1	3/18/93	ADDED ASSUMPTION NOTE A PER CR-HVVP-0374	MFF	LA	RT	LA
			CDC	JLS	GWF	PMC
0	3/30/93	RELEASED FOR PROJECT BASELINE CONTROL PER CR HVVP-0480	MFF	MGM	RT	MGM
			JMS	FB	DPC	PMC
01	2/26/93	ISSUED FOR FLUOR DANIEL CONTROL PER CR HVVP-0446-2	SA	TC	RT	MM
			JS	FB	DC	RG
00	9/24/92	RELEASED FOR DETAILED DESIGN	SA	TC	RT	MM
			JS	FB	DC	RG

ENGINEERING RELEASE
REV. ____ DATE ____
ERD ____

	DATE
R A GIBBONS	9/21/92
D P CHAWLA	9/21/92
F G BROOKS	9/21/92
J L SMETS	9/19/92
M G MERCADO	9/19/92
R G TAGNEY	9/19/92
T Y CHEN	9/17/92
S ANVAR	9/19/92
H VERGEL-DE-DIOS	9/16/92

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10838

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

HVAC FLOW & CONTROL DIAGRAM
SYSTEM 05
VITRIFICATION BUILDING ZONE 1
CANYON, RW & CDMC AREAS

HANFORD WASTE VITRIFICATION PLANT

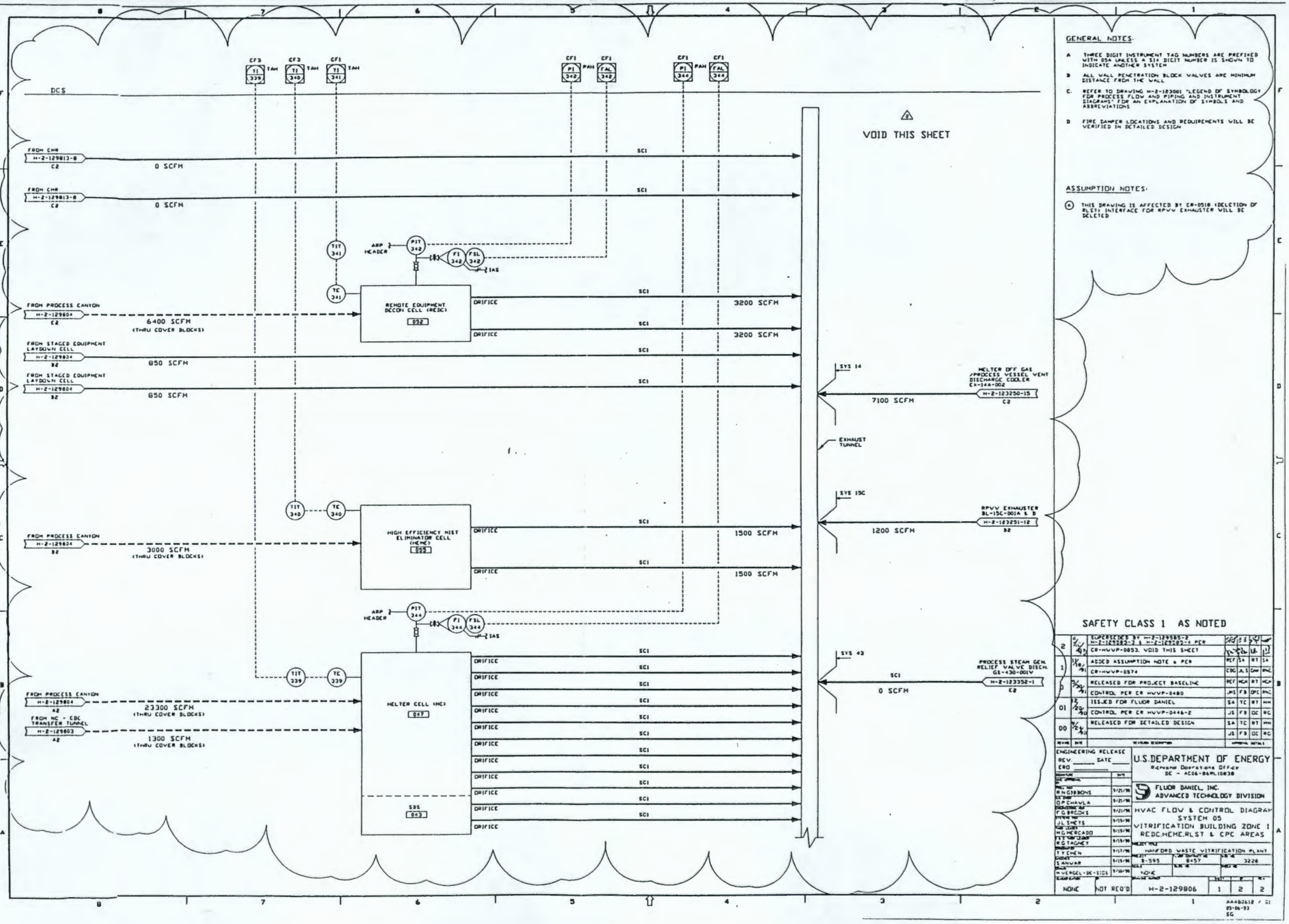
SCALE	DRAWING NO.	SHEET	REV
NONE	H-2-129805	1	2

NONE | NOT REQ'D

AA4BG512 / 01
05-06-93
SG

RELEASED FOR PROJECT BASELINE CONTROL

MAY 10 1993



GENERAL NOTES:

A. THREE DIGIT INSTRUMENT TAG NUMBERS ARE PREFIXED WITH 05A UNLESS A SIX DIGIT NUMBER IS SHOWN TO INDICATE ANOTHER SYSTEM

B. ALL WALL PENETRATION BLOCK VALVES ARE MINIMUM DISTANCE FROM THE WALL

C. REFER TO DRAWING H-2-123001 "LEGEND OF SYMBOLOGY FOR PROCESS FLOW AND PIPING AND INSTRUMENT DIAGRAMS" FOR AN EXPLANATION OF SYMBOLS AND ABBREVIATIONS

D. FIRE DAMPER LOCATIONS AND REQUIREMENTS WILL BE VERIFIED IN DETAILED DESIGN

ASSUMPTION NOTES:

(6) THIS DRAWING IS AFFECTED BY CR-0518 (DELETION OF RLST) INTERFACE FOR RPVV EXHAUSTER WILL BE DELETED

SAFETY CLASS 1 AS NOTED

REV	DATE	REVISION DESCRIPTION	DRAWN	CHK	APPR	APPROVAL DETAILS
2	5/11/93	SUPERSEDES BY H-2-129585-2 H-2-123282-3 & H-2-123282-4 PER CR-HVVP-0852. VOID THIS SHEET				
1	3/18/93	ADDED ASSUMPTION NOTE 6 PER CR-HVVP-0574	RCF SA	RT SA	CDG JLS	DMW RMC
0	3/22/93	RELEASED FOR PROJECT BASELINE	RCF	HGA	RT	HGA
		CONTROL PER CR HVVP-0480	JMS	FB	DPC	RMC
01	12/23/90	ISSUED FOR FLUOR DANIEL	SA	TC	RT	MM
		CONTROL PER CR HVVP-0446-2	JS	FB	DC	RG
00	9/24/90	RELEASED FOR DETAILED DESIGN	SA	TC	RT	MM
			JS	FB	DC	RG

ENGINEERING RELEASE
REV. ____ DATE ____
ERO ____

R N GIBBONS	9/21/90
D P CHAVLA	9/21/90
F G BROOKS	9/21/90
J L SMETS	9/19/90
H G MERCADO	9/19/90
R G TAGNEY	9/19/90
T Y CHEN	9/17/90
S ANWAR	9/19/90
H VENGEL-DE-SIDI	9/20/90

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10838

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

HVAC FLOW & CONTROL DIAGRAM
SYSTEM 05
VITRIFICATION BUILDING ZONE 1
REDC,HEMC,RLST & CPC AREAS

HANFORD WASTE VITRIFICATION PLANT

SCALE	DWG NO	SHEET
1:595	8457	3228

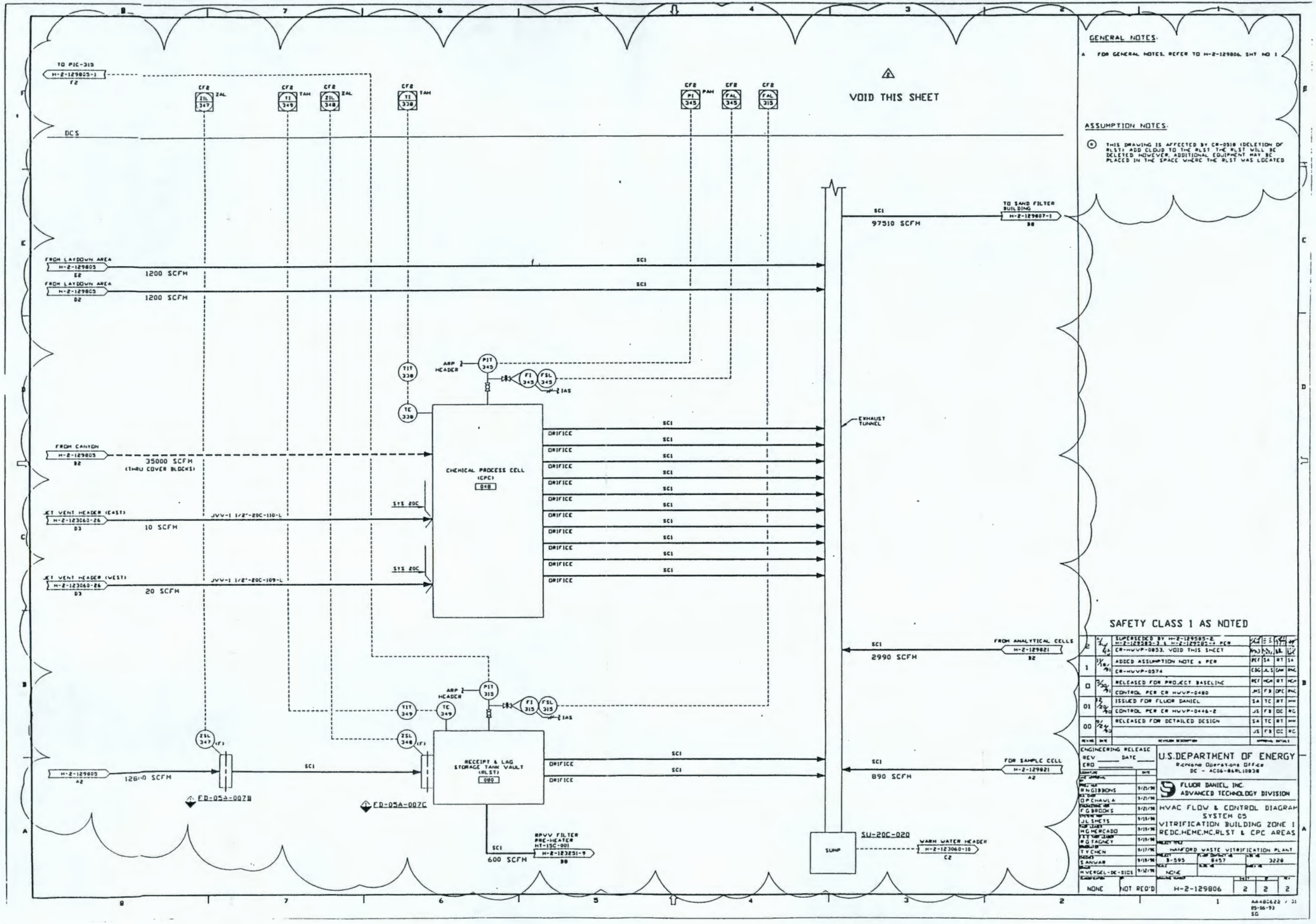
NONE

NONE	NOT REQ'D	H-2-129806	1	2	2

AA480612 / C1
05-06-93
SG

RELEASED FOR PROJECT BASELINE CONTROL

MAY 1 0 1993



GENERAL NOTES:

A FOR GENERAL NOTES, REFER TO H-2-129806, SHT NO 1

ASSUMPTION NOTES:

⊙ THIS DRAWING IS AFFECTED BY CR-0518 (DELETION OF RLST) ADD CLOUD TO THE RLST THE RLST WILL BE DELETED HOWEVER, ADDITIONAL EQUIPMENT MAY BE PLACED IN THE SPACE WHERE THE RLST WAS LOCATED

SAFETY CLASS 1 AS NOTED

REV	DATE	REVISION DESCRIPTION					
2	4/26/93	SUPERSEDES BY H-2-129585-2, H-2-123283-3 & H-2-129582-4 PER CR-HWVP-0853. VOID THIS SHEET					
1	11/18/91	ADDED ASSUMPTION NOTE A PER CR-HWVP-0574	PEF	SA	RT	SA	
			CDC	J.S	GAW	PHC	
0	3/29/91	RELEASED FOR PROJECT BASELINE CONTROL PER CR HWVP-0480	PEF	HGM	RT	HGM	
			JHS	FB	DPC	PHC	
01	12/20/90	ISSUED FOR FLUOR DANIEL CONTROL PER CR HWVP-0446-2	SA	TC	RT	HH	
			JS	FB	DC	RG	
00	9/24/90	RELEASED FOR DETAILED DESIGN	SA	TC	RT	HH	
			JS	FB	DC	RG	

ENGINEERING RELEASE
REV ____ DATE ____
ERD ____

DESIGNED BY	R N GIBBONS	9/21/90
DESIGN LEAD	O P CHAWLA	9/21/90
PROCESS ENGINEER	F G BROOKS	9/21/90
PROJECT ENGINEER	J.L. SMETS	9/19/90
PROJECT LEADER	M G MERCADO	9/19/90
PROJECT MANAGER	R G TAGNEY	9/19/90
DRAFTED BY	T Y CHEN	9/17/90
CHECKED BY	S ANWAR	9/19/90
APPROVED BY	H VERGEL-DE-DIOS	9/12/90

U.S. DEPARTMENT OF ENERGY
Richland Operations Office
DE - AC06-86RL10838

FLUOR DANIEL, INC.
ADVANCED TECHNOLOGY DIVISION

HVAC FLOW & CONTROL DIAGRAM
SYSTEM 05
VITRIFICATION BUILDING ZONE 1
REDC, HEME, MC, RLST & CPC AREAS

PROJECT TITLE: HANFORD WASTE VITRIFICATION PLANT
PROJECT: B-595
FLUOR DANIEL No.: 8457
CONTRACT No.: 3228
SCALE: NONE
APPROVED BY: NONE
SHEET 2 OF 2 REV 2

NONE | NOT REQ'D | H-2-129806

AA480622 / 31
05-06-93
SG