START

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 20, 1994

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

Transmittal No.: WDOE-987

Dear Mr. Grantham:

TRANSMITTAL

We enclosed 1 copy of the items listed below. These are issued per US-DOE request.

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

NUMBER	REV	DATE	TITLE
DCN - 0194	3	10/19/94	DCN TITLE: **FIRE WATER PUMP HOUSE MODIFICATIONS** **NOTE: "FOR RCRA PART B PERMIT"**

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/0
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:HS:nre

OCT 1994
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9514HR.2148

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0194	REV 3	DISCIPLINE ELECTRICAL	PKG. NO. A160	PAGE 4

PREPARED BY: H. Ajmerghi Date: 8/29/94

DISCIPLINE ENGINEER: [illegible] Date: 8-29-94

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"	2, 2A & 2B	2	CONDUIT SCHEDULE	Y	Rev 1 Change: DELETED CONDUIT A0907 & ADDED CONDUITS A0908 TO A0908R Rev 2 Change: ADDED CONDUITS A0909, A0909A & A0910
ATTACHMENT "B"	1 & 20, 1A, 1B & 1C	2	CABLE SCHEDULE	Y	ADDED CABLES A0927 TO A0932; Rev 1 Change: SPARED CABLES A0915, A0916, A0921, A0922, A0923 Rev 2 Change: ADDED CABLES A0939 THRU A0952 & A0959 THRU A0973, DELETED A0912
H-2-122087	1	1	INSTRUMENT CONDUIT ROUTING PLAN	Y	ADDED CONDUITS A0907 & A0908 THRU A0908R Rev 1 Change: ADDED INSTRUMENT PSL-FWX-387 & CONDUITS A0909 & A0909A Rev 2 Change:
H-2-122088	2	0	ELECTRICAL POWER, GNDG & LIGHTNING PROTECTION PLAN	Y	DELETED HEAT TRACING ON LINE DRX-4"-530-009-G
H-2-122098	1	2	ELECTRICAL PANEL SCHEDULES	Y	DELETED HEAT TRACING LOAD ON CIRCUIT C5 FOR DRX-4"-530-009-G; Rev 1 Change: ADDED RECEPT FOR TRANSMITTER
H-2-122094	1	1	ELECTRICAL POWER, LTG & HEAT TRACING SECTIONS & DETAILS	Y	DELETED CONDUIT A0907 Rev 2 Change: ADDED CONDUITS A0909 & A0910
H-2-122100	1	1	ELECTRICAL CONNECTION DIAGRAMS	Y	FWPH/BUILDING 283 EAST ANNUNCIATOR INSTALLATION; Rev 1 Change: REVISED WIRING FOR TB-20-A/B1 & TB-20-A2 Rev 2 Change: ADDED WIRING BETWEEN TB-20-A2 & TRANSMITTER AND RECEIVER & ANNUNCIATOR

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

KARUMESH KUMAR [illegible] STATE OF WASHINGTON PROFESSIONAL ENGINEER

10/19/94

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

EXPIRES 7-13-95

FORM REV. 09/23/93
P:\8457\DCNS\ 08/23/94 1:14pm

FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN – 0194	REV 3	DISCIPLINE: ELECTRICAL	PKG. NO. A160	PAGE 4A

PREPARED BY: A. Spuenzli Date: 8/29/94

DISCIPLINE ENGINEER: [illegible] Date: 8-29-94

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/ PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
H-2-122091	1	1	ELECTRICAL LIGHTING & COMMUNICATIONS PLAN	Y	ADDED RECEPTACLE FOR TRANSMITTER
H-2-122100	4	1	ELECTRICAL CONNECTION DIAGRAMS	Y	REVISED WIRING ON LP-500-002A/B
H-2-122100	3	0	ELECTRICAL CONNECTION	Y	COILED & TAPED CABLE A0923

REV. 1 CHANGE

REV. 3 CHANGE

H-2-122100	1	1	ELECTRICAL CONNECTION DIAGRAMS	Y	ADDED PANEL ENCLOSURE DESCRIPTION. CLARIFIED NUMBERING OF ANNUNCIATOR WINDOWS & CLARIFIED THE LABELING OF THE WIRING AT TB-20-A2.

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

NAGINDER KUMAR SIDHU
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER

10/19/94

EXPIRES 7-13-95

ISSUED FOR DEPARTMENT OF ECOLOGY

FORM REV. 09/23/93
P:\8457\DCNS\ 08/23/94 11:14am

DELETE PER DCN-0182

cal Raceway Schedule for Package Number A160

BLDG NO.	RACEWY NO.	FOR	FROM		TO		RACEWAY DATA			INCLUDED CABLE NOS.
			EQUIPMENT NUMBER OR LOCATION	PLAN DRAWING	EQUIPMENT NUMBER OR LOCATION	PLAN DRAWING	SIZE	TYPE	MATERIAL OF CONSTR	
~~20~~	~~A0802A~~	~~ALARM~~	~~A0802,A0802C~~	~~H-2-122087-1~~	~~A0802B~~	~~H-2-122087-1~~	~~3/4"~~	~~COND~~	~~IMC~~	~~A0805~~
~~20~~	~~A0802B~~	~~ALARM~~	~~A0802A~~	~~H-2-122087-1~~	~~PSL-FWX-388~~	~~H-2-122087-1~~	~~1/2"~~	~~COND~~	~~FLEX~~	~~A0805~~
~~20~~	~~A0802C~~	~~ALARM~~	~~A0802,A0802A~~	~~H-2-122087-1~~	~~PSH-FWX-387~~	~~H-2-122087-1~~	~~1"~~	~~COND~~	~~FLEX~~	~~A0804~~
21	A0900	ALARM	LSL/H-DRX-402	H-2-122087-2	A0900A	H-2-122087-2	1-1/2"	COND	FLEX	A0900,A0901
21	A0900A	ALARM	A0900	H-2-122087-2	TB-21-A/B1	H-2-122087-2	1-1/2"	COND	IMC	A0900,A0901,A0911
~~20~~	~~A0900~~	~~ALARM~~	~~TB-20-A/B1~~	~~H-2-122087-1~~	~~TB-20-A2~~	~~H-2-122087-1~~	~~3/4"~~	~~COND~~	~~IMC~~	~~A0927~~
21	A0900B	ALARM	A0900A	H-2-122087-2	A0900C	H-2-122087-2	1"	COND	IMC	A0911
21	A0900C	ALARM	A0900B	H-2-122087-2	ZSL-FWX-263	H-2-122087-2	1"	COND	FLEX	A0911
21	A0901	ALARM	LP-500-008A	H-2-122087-2	TB-21-A/B1	H-2-122087-2	1"	COND	IMC	A0903
23	A0902	ALARM	TB-23-A/B1	H-2-122087-2	A0902A/B	H-2-122087-2	2"	COND	IMC	A0904,A0905,A0907,A0908,A0909,A0910
23	A0902A	ALARM	A0902/B	H-2-122087-2	LP-500-008B	H-2-122087-2	3/4"	COND	IMC	A0907
23	A0902B	ALARM	A0902/A	H-2-122087-2	A0902C/E	H-2-122087-2	2"	COND	IMC	A0904,A0905,A0908,A0909,A0910
23	A0902C	ALARM	A0902B/E	H-2-122087-2	A0902D	H-2-122087-2	1-1/2"	COND	IMC	A0904,A0905
23	A0902D	ALARM	A0902C	H-2-122087-2	LSL/H-DRX-601	H-2-122087-2	1-1/2"	COND	FLEX	A0904,A0905
23	A0902E	ALARM	A0902C/E	H-2-122087-2	A0902F/H	H-2-122087-2	1-1/2"	COND	IMC	A0908,A0909,A0910
23	A0902F	ALARM	A0902F/H	H-2-122087-2	A0902H	H-2-122087-2	1-1/2"	COND	IMC	A0908,A0909
23	A0902G	ALARM	A0902F	H-2-122087-2	ZSH/ZSL-RWX-004	H-2-122087-2	1-1/2"	COND	FLEX	A0908,A0909

KAMLESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
EXPIRES 7-13-95

DELETE PER DCN-0194 REV 1

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

DCN-0161 Rev

HOLD No HWVP-FD-440 DCN-0161

-ical Raceway Schedule for Package Number A160

BLDG NO.	RACEWY NO.	FOR	FROM		TO		RACEWAY DATA			INCLUDED CABLE NOs.
			EQUIPMENT NUMBER OR LOCATION	PLAN DRAWING	EQUIPMENT NUMBER OR LOCATION	PLAN DRAWING	SIZE	TYPE	MATERIAL OF CONSTR	
20	A0908	ALARM	TB-20-A2	H-2-122087-1	A908A, A908D	H-2-122087-1	2"	COND	IMC	A0927, A0928, A0929, A0930 A0931, A0932
20	A0908A		A0908		A0908B		3/4"		IMC	A0931
20	A0908B		A0908A		ZSL-FNX-012-2		3/4"		FLEX	A0931
20	A0908C		NOT USED							
20	A0908D		A0908, A0908A		A908E, A908G		1½"		IMC	A0927, A0928, A0929, A0930, A0932
20	A0908E		A0908D, A0908G		A0908F		3/4"		IMC	A0930
20	A0908F		A0908E		ZSL-FNX-017-2		3/4"		FLEX	A0930
20	A0908G		A0908D, A908E		A0908H, A0908K		1½"		IMC	A0927, A0928, A0929, A0932
20	A0908H		A0908G, A0908K		A0908J		3/4"		IMC	A0932
20	A0908J		A0908 H		TSLL-FNX-005		3/4"		FLEX	A0932
20	A0908K		A0908G, A0908H		A0908L, A0908Q		3/4"		IMC	A0927, A0928, A0929
20	A0908L		A0908K, A0908Q		A0908M, A0908N		3/4"		IMC	A0928, A0929
20	A0908M		A0908L, A0908N		ZSL-FNX-012-1		3/4"		FLEX	A0929
20	A0908N		A0908L, A0908M		A0908P		3/4"		IMC	A0928
20	A0908P		A908 N		ZSL-FNX-017-1		3/4"		FLEX	A0928
20	A0908Q		A0908K, A0908L		A0908R		3/4"		IMC	A0927
20	A0908R		A0908Q		LSL/H-DRX-501		3/4"		FLEX	A0927

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

KASHINESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
10/14/94
EXPIRES 7-13-95

Electrical Conduit Schedule for Package Number A160

REV NO.	BLDG NO.	RACEWY NO.	FOR	FROM		TO		RACEWAY DATA			INCLUDED CABLE NOs.
				EQUIPMENT NUMBER OR LOCATION	PLAN DRAWING	EQUIPMENT NUMBER OR LOCATION	PLAN DRAWING	SIZE	TYPE	MATERIAL OF CONSTR	
	20	A0909	ALARM	TB-20-A2	H-2-122087-1	A0909A	H-2-122087-1	3/4"	COND	IMC	A0973
	↓	A0909A	↓	A0909	↓	PSL-FWX-387	↓	↓	↓	FLEX	A0973
	20	A0910	ALARM	TB-20-A2	H-2-122087-1	TRANS/ANNUN INTERFACE PNL	H-2-122087-1	2"	COND	IMC	A0939 THRU A0952

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KARUNESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
8/19/94

EXPIRES 7-13-95

DCN-0194 REV 2

DCN-0194 REV 3
PAGE 9B

DELETE PER DCN-0182

Electrical Cable Schedule for Package Number A160

REV NO.	BLDG NO.	CABLE NO.	FROM		TO		CABLE DATA				ONE LINE DIAGRAM NO. M-2-	
			EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	SYS VOLT	NO. COND	SIZE	CABLE CODE		
2	20	A0800	TB-20-A/B1	M-2-122100-1	LSH-DRX-501	M-2-122100-1	120V ac	2	14	AE		A0800,A0800A
	20	A0928	TB-20-A2	H-2-122100-1	ZSL-FWX-017-1	X05/H-2-122082-3	120V ac	2	14	AE		A908P,A908N,A908L,A908E,A908G,A908,D,7/2/94
2	20	A0801	TB-20-A/B1	M-2-122100-1	LSL-DRX-501	M-2-122100-1	120V ac	2	14	AE		A0800,A0800D A908
	20	A0929	TB-20-A2	H-2-122100-1	ZSL-FWX-012-1	X05/H-2-122082-3	120V ac	2	14	AE		A908M,A908L,A908K,A908G A908D,A908
2	20	A0802	NOT USED									A908F,A908E,A908D,A908
	20	A0930	TB-20-A2	H-2-122100-1	ZSL-FWX-017-2	X05/H-2-122082-3	120V ac	2	14	AE		DCN-0194
2	20	A0803	LP-DRX-501	M-2-122100-1	LSL/H-DRX-501	M-2-122100-1	120V ac	2	14	AE		A0800B,A0800D,A0800C
	20	A0931	TB-20-A2	H-2-122100-1	ZSL-FWX-012-2	X05/H-2-122082-3	120V ac	2	14	AE		A908B,A908A,A908
2	20	A0804	TB-20-A/B1	M-2-122100-1	PSH-FWX-387	X05/H-2-122082-3	120V ac	2	14	AE		A0802,A0802C
2	20	A0805	TB-20-A/B1	M-2-122100-1	PSL-FWX-388	X05/H-2-122082-3	120V ac	2	14	AE		A0802,A0802A,A0802B
2	20	A0806	LP-500-007	M-2-122100-3	TSH-FWX-368	X02/H-2-122082-3	120V ac	2	14	AE		A0801,A0801A,A0801B
	20	A0932	TB-20-A2	H-2-122100-1	TSLL-FWX-005	X05/H-2-122082-3	120V ac	2	14	AE		A908J,A908H,A908G A908D,A908
2	20	A0807	LP-600-007	M-2-122100-3	TSLL-FWX-005	X02/H-2-122082-3	120V ac	2	14	AE		A0801,A0801C,A0801D
	20	A0927	LSL/H-DRX-501	H-2-122100-1	TB-20-A2	H-2-122100-1	120V ac	2	14	AE		A0907
2	21	A0900	TB-21-A/B1	M-2-122100-2	LSH-DRX-402	X14/H-2-122082-3	120V ac	2	14	AE		A0900,A0900A
2	21	A0901	TB-21-A/B1	M-2-122100-2	LSL-DRX-402	X14/H-2-122082-3	120V ac	2	14	AE	DCN-0182	A0900,A0900A
2	22	A0902	TB-23-A/B1	H-2-122100-2	LP-500-008B	H-2-122087-8	120V ac	2	14	AE		A0906,A0906A
2	21	A0903	TB-21-A/B1	M-2-122100-2	LP-500-008A	M-2-122087-8	120V ac	2	14	AE		A0901 HOLD N2 HWVP-PP-440, DCN-01
2	23	A0904	TB-23-A/B1	M-2-122100-2	LSL-DRX-601	X14/M-2-122082-3	120V ac	2	14	AE		A0902,A0902B,A0902C, A0902D
	23	A0928	TB-23-A/B1	H-2-122100-2	LSL-DRX-601	X14/H-2-122082-3	120V ac	2	14	AE		A0906,A0906B,C
2	23	A0905	TB-23-A/B1	M-2-122100-2	LSH-DRX-601	X14/M-2-122082-3	120V ac	2	14	AE		A0902,A0902B,A0902C, A0902D
	23	A0926	TB-23-A/B1	H-2-122100-2	LSH-DRX-601	X14/H-2-122082-3	120V ac	2	14	AE		A0906,A0906B,C
2	23	A0906	NOT USED									DCN-0161
2	23	A0907	TB-23-A/B1	M-2-122100-2	LP-500-008B	M-2-122087-8	120V ac	2	14	AE		A0902,A0902A

HOLD N2 HWVP-PP-440 DCN-440

* coaxial Cable Furnished by Vendor

DCN-0194 REV 3 HWVP-PP-440 DCN-440
PAGE 10

DCN-0194 REV 1 DCN-0194 REV 2

Electrical Cable Schedule for Package Number A160

REV NO.	BLDG NO.	CABLE NO.	FROM: EQUIPMENT NUMBER OR LOCATION	FROM: CONNECTION DRAWING	TO: EQUIPMENT NUMBER OR LOCATION	TO: CONNECTION DRAWING	CABLE DATA: SYS VOLT	NO. COND	SIZE	CABLE CODE	VIA
2	20	P0079Q	DA-32A-801		TIC-05AB-007		480V ac	1	10	AM	P0127,P0127A
	20	A0912	LP-500-002A	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905A,A0905C,A0905
2	20	P0080B	TIC-05AB-007		BL-05AB-007		480V ac	1	10	AM	P0127A,P0127B,P0127C
	20	A0913	LP-500-002A	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905A,A0905C,A0905
2	20	P0080C	TIC-05AB-007		BL-05AB-007		480V ac	1	10	AM	P0127A,P0127B,P0127C
	20	A0914	LP-500-002A	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905A,A0905C,A0905
2	20	P0080G	FTG B TIC-05AB-007		BL-05AB-007		480V ac	1	10	AM	P0127A,P0127B,P0127C
	20	A0915	LP-500-002A SPARE	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905A,A0905C,A0905
2	20	X0825	TB-20-X1, IT-FWX-013-1	H-2-122100-1	LP-500-002B	H-2-122100-4	4-20mA	2	16	AD	X0811,X0811A
	20	A0916	LP-500-002A SPARE	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905A,A0905C,A0905
2	20	X0826	TB-20-X1, IT-FWX-013-1	H-2-122100-1	LP-500-002A	H-2-122100-4	4-20mA	2	16	AD	X0811,X0811B
	20	A0917	LP-500-002A SPARE	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905A,A0905C,A0905
2	20	X0827	TB-20-X1, FI-RPW-907A	H-2-122100-1	LP-500-007	H-2-122100-3	4-20mA	2	16	AD	X0805
	20	A0918	LP-500-002B	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905B,A0905C,A0905
2	20	X0828	TB-20-X1, LIT-FWX-001	H-2-122100-1	LIT-FWX-001	X03/H-2-122082-3	4-20mA	2	16	AD	X0810,X0810A,X08100
	20	A0919	LP-500-002B	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905B,A0905C,A0905
2	20	X0829	TB-20-X1, FIT-SWX-711	H-2-122100-1	FIT-SWX-711	X03/H-2-122082-3	4-20mA	2	16	AD	X0810,X0810C,X08100
	20	A0920	LP-500-002B	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905B,A0905C,A0905
2	21	X0903	LP-500-001A, IT-RWX-017-1	H-2-122100-7	TB-21-X1	H-2-122100-2	4-20mA	2	16	AD	X0904,X0904A
2	21	X0909	LP-500-001B, IT-RWX-017-2	H-2-122100-7	TB-21-X1	H-2-122100-2	4-20mA	2	16	AD	X0904,X0904B
2	20	T0800	LP-500-006	H-2-122100-6	TE-FWX-367	X11/H-2-122082-3	mV	2	16	CA	T0800,T0800A
	20	A0923	LP-500-007 SPARE	H-2-122100-3	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905D,A0905
	20	A0921	LP-500-002B SPARE	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905B,A0905C,A0905
	20	A0922	LP-500-002B SPARE	H-2-122100-4	TB-20-A2	H-2-122100-1	120Vac	2	14	AE	A0905B,A0905C,A0905

* Coaxial Cable Furnished By Vendor

HOLD NO. HWVP-FD-450 DCN-0153

DCN-0194 REV 3
PAGE 10A

ISSUED FOR CONSTRUCTION
STATE OF WASHINGTON
RAMESH KUMAR SRIVASTAVA
EXPIRES 4-13-95
01/19/94

trical Cable Schedule for Package Number A160

BLDG NO.	CABLE NO.	FROM		TO		CABLE DATA				ONE LINE DIAGRAM NO. H-2-	VIA
		EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	SYS VOLT	NO. COND	SIZE	CABLE CODE		
20	A0939	TB-20-A2	H-2-122100-1	TRANS/ANNUN INTERFACE PNL	H-2-122100-1	24 VDC	1	14	AK		A0910
	A0940										
	A0941										
	A0942										
	A0943										
	A0944										
	A0945										
	A0946										
	A0947										
	A0948										
	A0949										
	A0950										
	A0951										
	A0952										

ISSUED FOR CONSTRUCTION
APPROVED FOR CONSTRUCTION

MAHESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
10/19/94
EXPIRES 7-13-95

DCN-0194 REV 2

DCN-0194 REV 3
PAGE 10B

rical Cable Schedule for Package Number A160

BLDG NO.	CABLE NO.	FROM		TO		CABLE DATA				ONE LINE DIAGRAM NO. H-2-	VIA
		EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	SYS VOLT	NO. COND	SIZE	CABLE CODE		
20	A0955	TRANS PWR SUPPLY	H-2-122100-1	TRANSMITTER TERMINALS	H-2-122100-1	24 VDC	1	14	AK		
20	A0956										
283E	A0959	RECEIVER/ANNUN INTERFACE PNL	H-2-122100-1	ANNUNCIATOR	H-2-122100-1	24 VDC	1	14	AK		CONDUIT BY OTHERS
	A0960										
	A0961										
	A0962										
	A0963										
	A0964										
	A0965										
	A0966										
	A0967										
	A0968										
	A0969										
	A0970										

ISSUED FOR DEPARTMENT OF ECOLOGY REVIEW ONLY

KARUNESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
7/19/94
EXPIRES 7-13-94

DCN-0194 REV 2

DCN-0194 REV 3
PAGE 10C

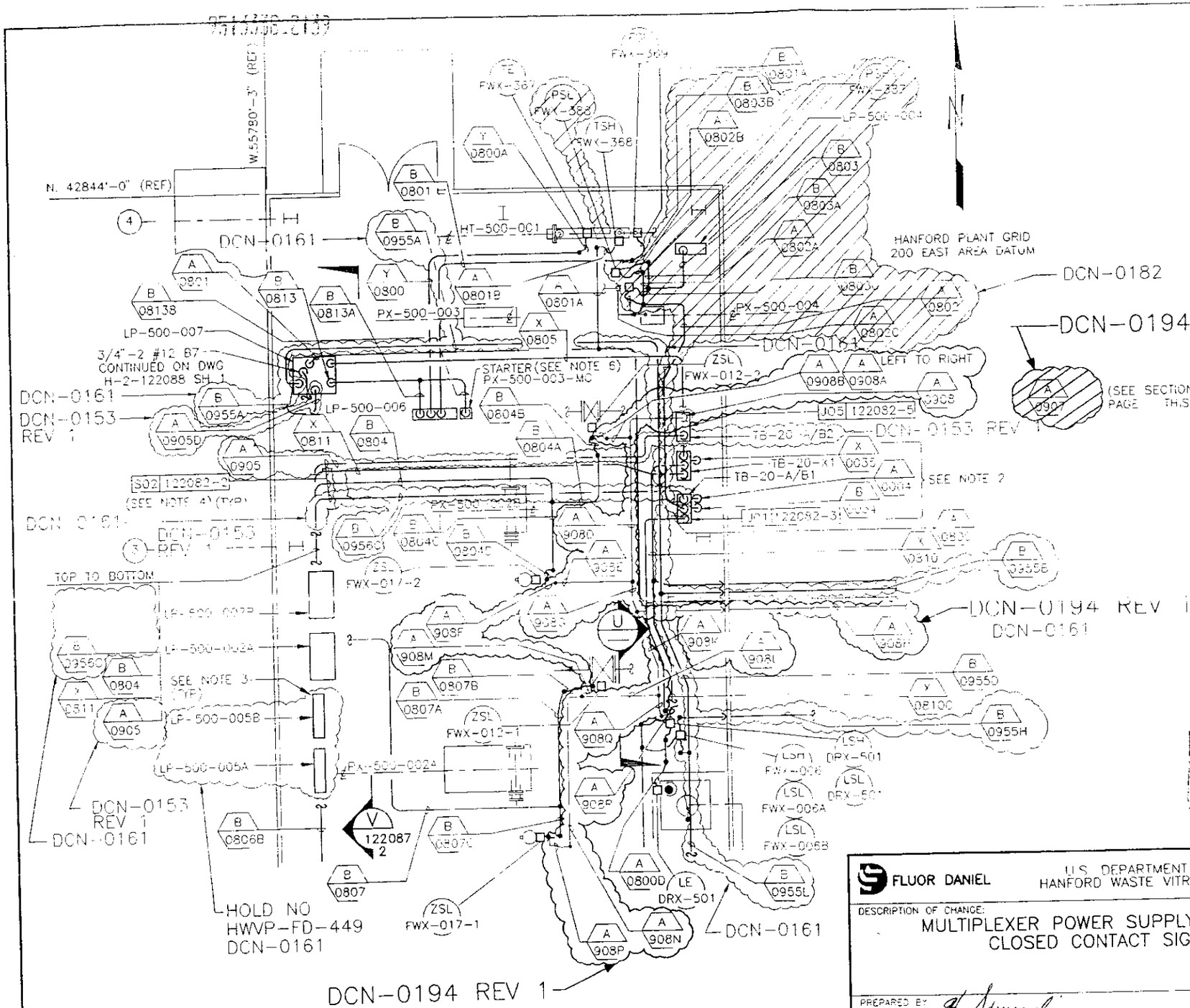
Interface Cable Schedule for Package Number A160

BLDG NO.	CABLE NO.	FROM		TO		CABLE DATA				ONE LINE DIAGRAM NO. H-2-	VIA
		EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	EQUIPMENT NUMBER OR LOCATION	CONNECTION DRAWING	SYS VOLT	NO. COND	SIZE	CABLE CODE		
283E	A0971	RECEIVER/ANNUN INTERFACE PNL	H-2-122100-1	ANNUNCIATOR	H-2-122100-1	24 VDC	1	14	AK		CONDUIT BY OTHERS
	A0972										CONDUIT BY OTHERS
20	A0973	TB-20-A2		PSL-FWX-387	X02/H-2-122082-3	120V ac	2	14	AE		A0909, A0909A

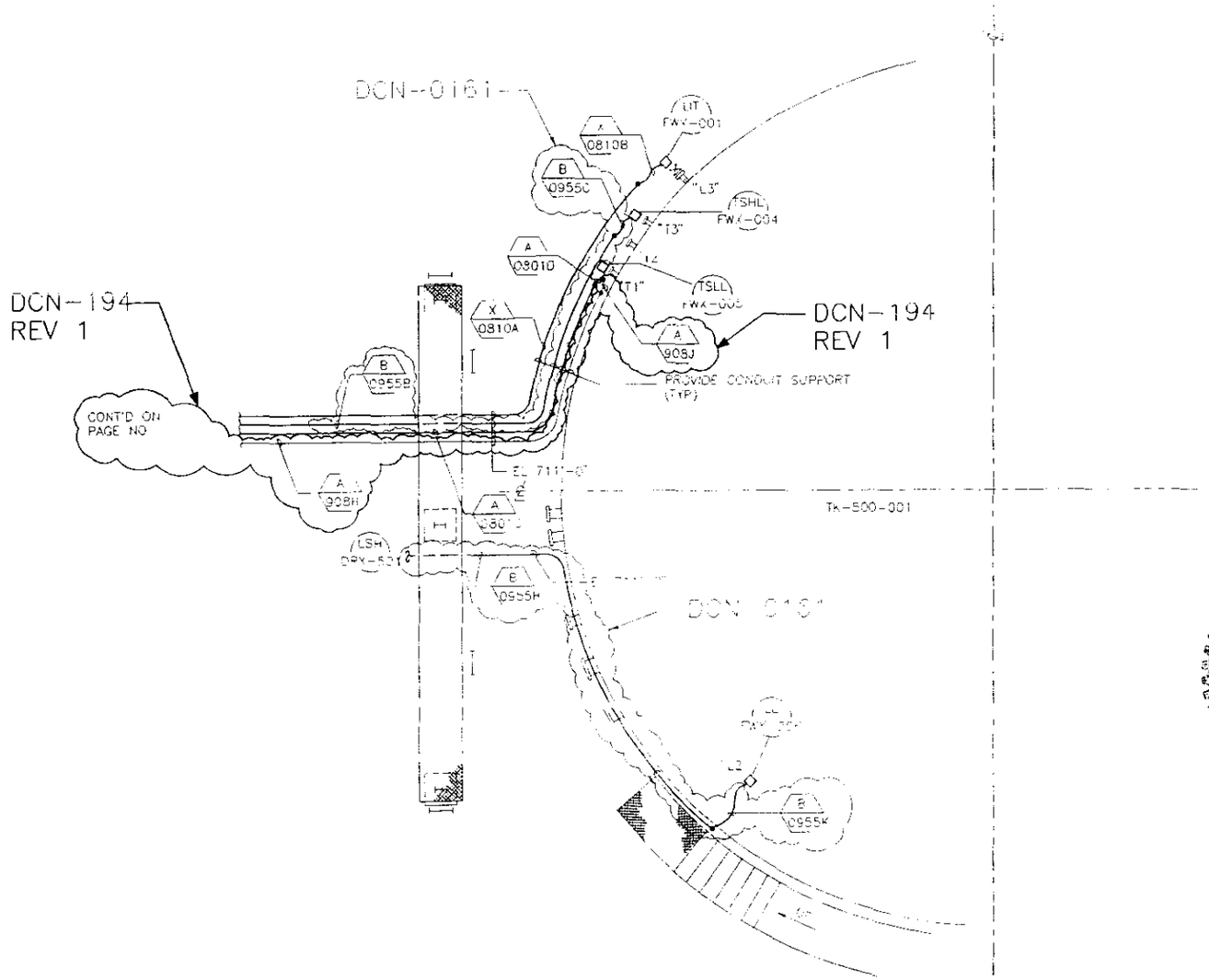
ISSUED FOR CONSTRUCTION

KARUNESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
9/94
EXPIRES 7-13-95

DCN-0194 REV 2 → DCN-0194 REV 3 PAGE 10D



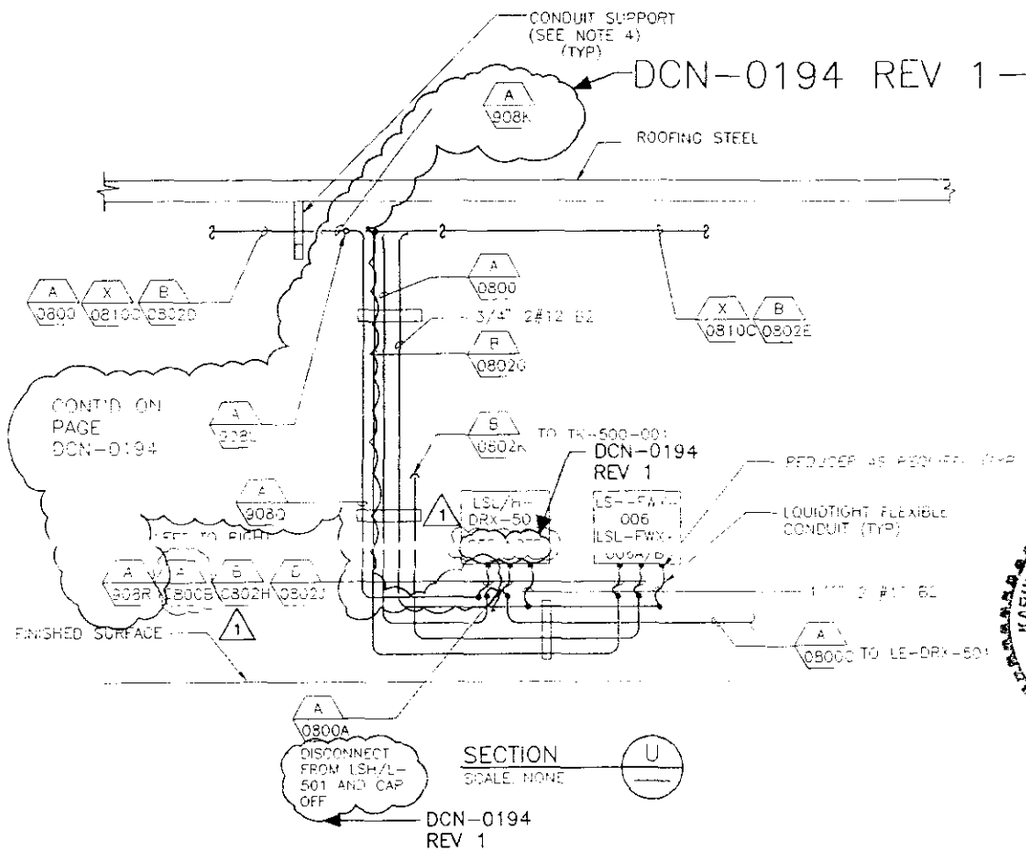
FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS		BASE DOC. NO. H-2-122087 SHT/PG 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE: ELECTRICAL
PREPARED BY: A. Spunzl	DATE: 8/29/94	DCN-0194 · REV 3 · PAGE 15
DISCIPLINE ENGINEER:	DATE: 8-29-94	



KARUNAKAR KUMAR SINGHANIA
STATE OF WASHINGTON
10/19/94
EXPIRES 7-13-95

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS		BASE DOC. NO. H-2-122087 SHT/PG. 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE: ELECTRICAL
PREPARED BY: G. Spinelli	DATE: 8/29/94	DCN-0194 REV. 3 PAGE 15A
DISCIPLINE ENGINEER: [illegible]	DATE: 8-29-94	



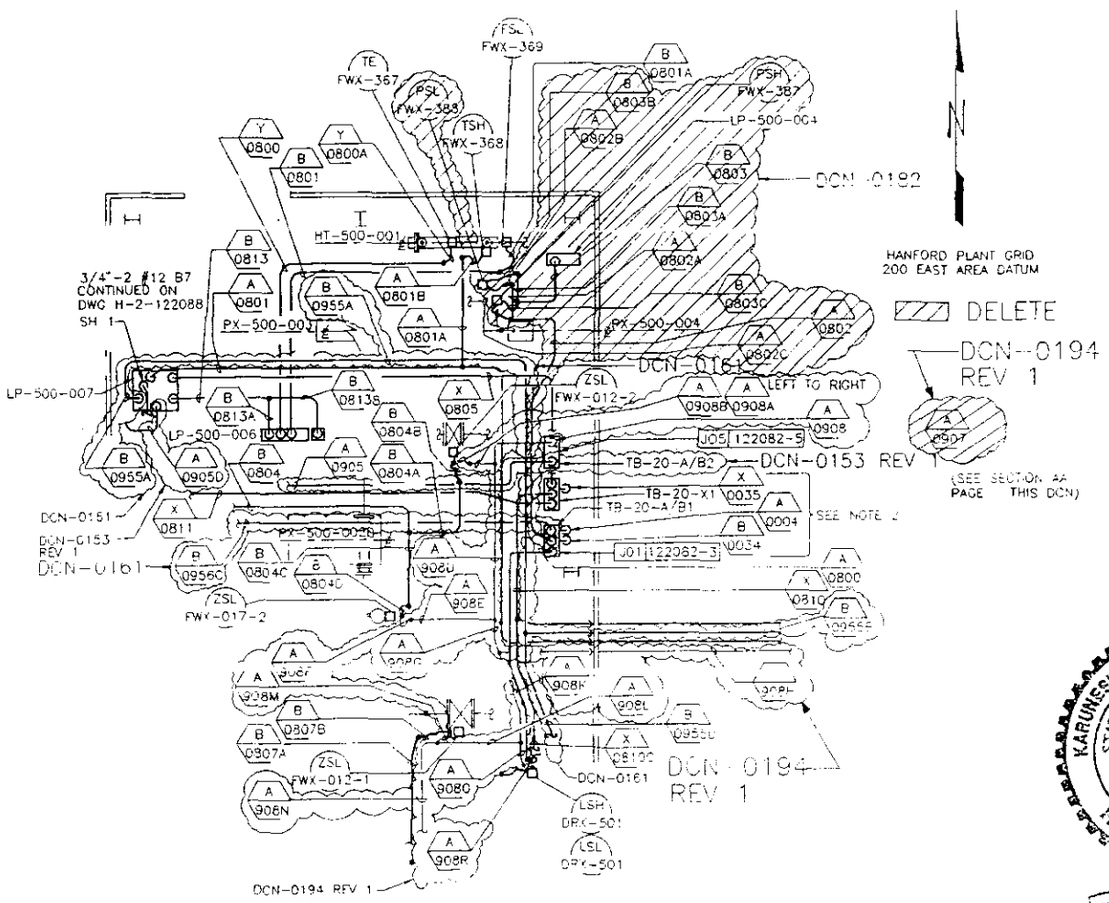
SECTION U
SCALE: NONE

NOTE:
DISCONNECT EXISTING CONDUCTORS WHICH TERMINATE @ LSH/L-DRX-501 AND COIL AND TAPE IN THE FIRST AVAILABLE FITTING. DISCONNECT AND CAP FLEX CONDUIT NO A-0800A AND ABANDON IN PLACE. TERMINATE NEW CABLE NO A-0827.

KASURESH KUMAR SINGHANIA
STATE OF WASHINGTON
EXPIRES 7-13-95
10/19/94

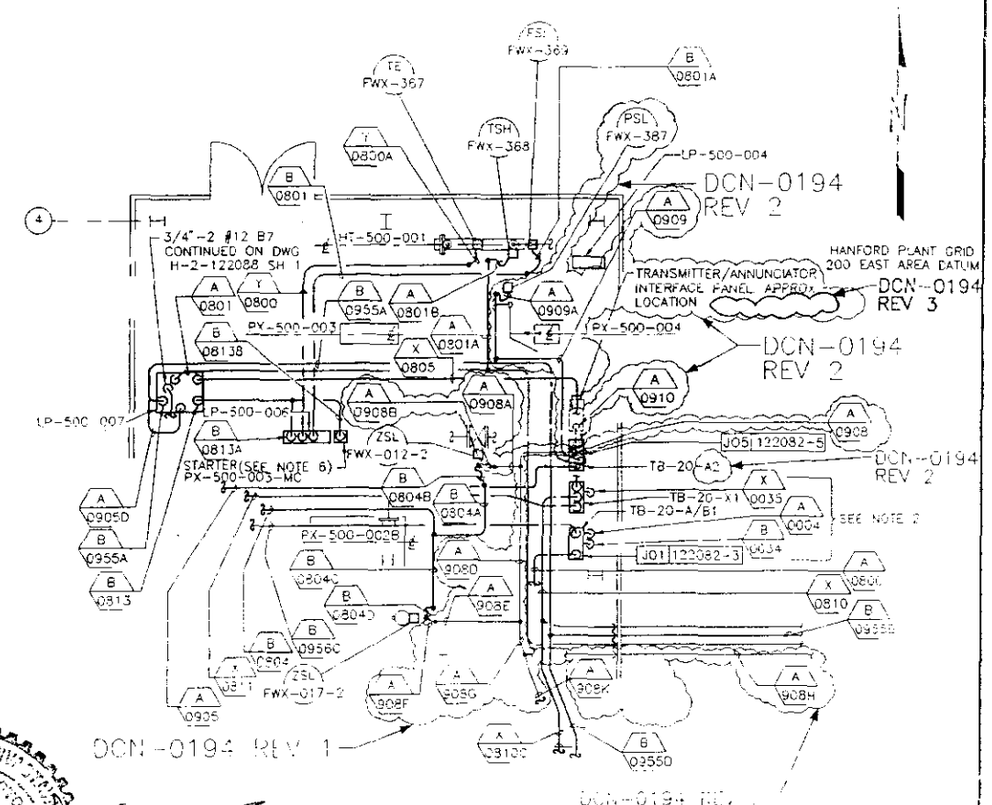
ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

FLUOR DANIEL — U.S. DEPARTMENT OF ENERGY, HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS		BASE DOC NO. H-2-122087; SHT/PG. 1; REV. 1; CR NO. HWVP-1124; DISCIPLINE ELECTRICAL
PREPARED BY: H. Amanfi	DATE: 8/29/94	DCN-0194 — REV 3 — PAGE 15B
DISCIPLINE ENGINEER:	DATE: 8-29-94	



PLAN "A"

SHOWS ALL PREVIOUS DCN'S
SINCE ISSUE OF BASE DOCUMENT
INCORPORATING DCN 0149 AND
ALL PREVIOUS DCN'S
SEE PLAN"B", THIS PAGE FOR
DCN-0194 REV 2



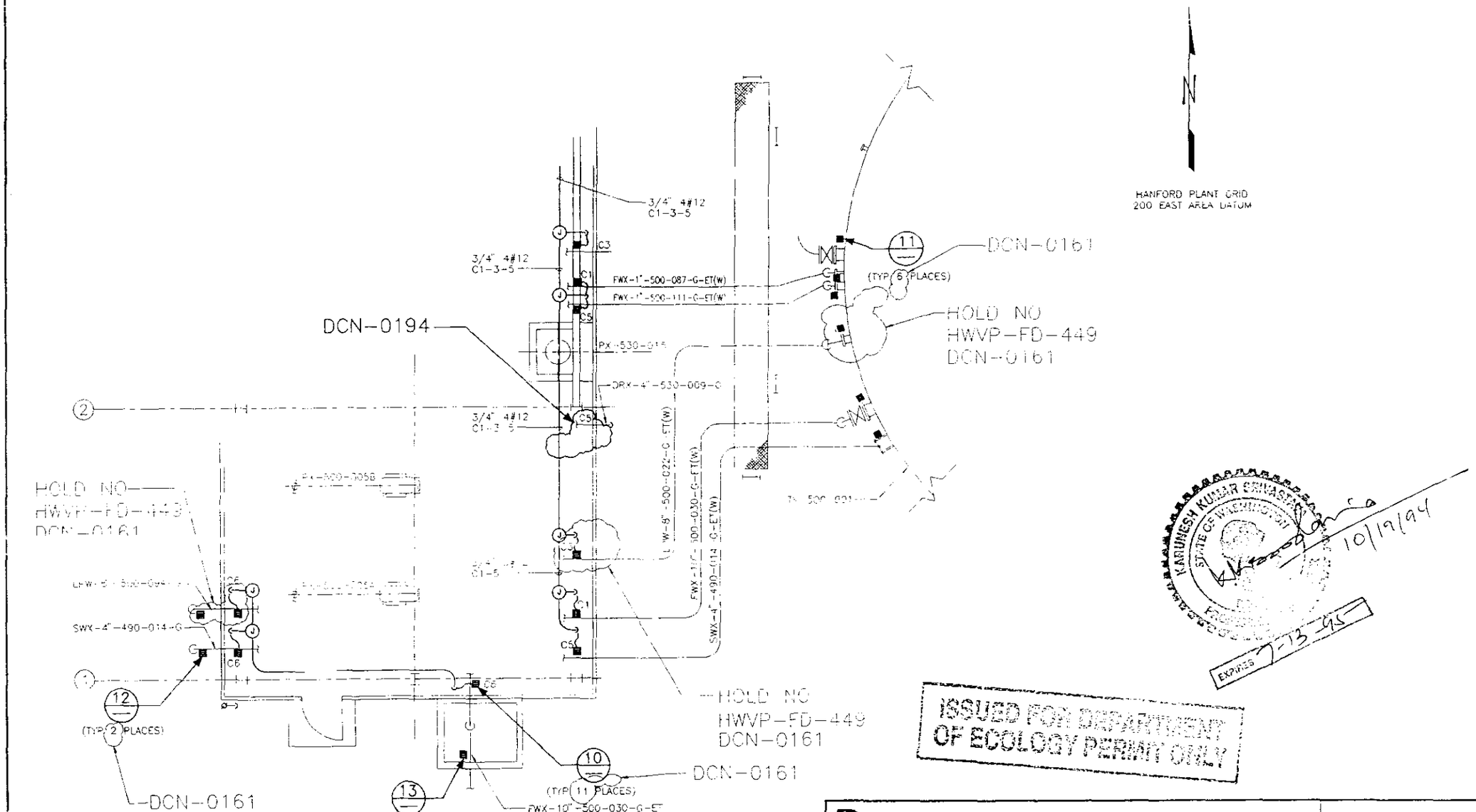
PLAN "B"

CLOUDING AND CALLOUTS FOR ALL BUT
THE MOST RECENT DCN HAS BEEN OMITTED
FOR CLARITY. SEE PLAN "A" FOR PREVIOUS
CALLOUTS AND CLOUDS

KARUNESH KUMAR GRIVASTAVA
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
10/19/94
EXPIRES 7-13-95

ISSUED FOR DEPARTMENT
OF ECOLOGY PERMIT ONLY

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: ANNUNCIATOR INTERFACE PANEL		BASE DOC. NO H-2-122087 SHT/PG. 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE. ELECTRICAL
PREPARED BY: A. Spinelli	DATE 8/29/94	DCN-0194 · REV 3 · PAGE 15C
DISCIPLINE ENGINEER: [illegible]	DATE 8-25-94	

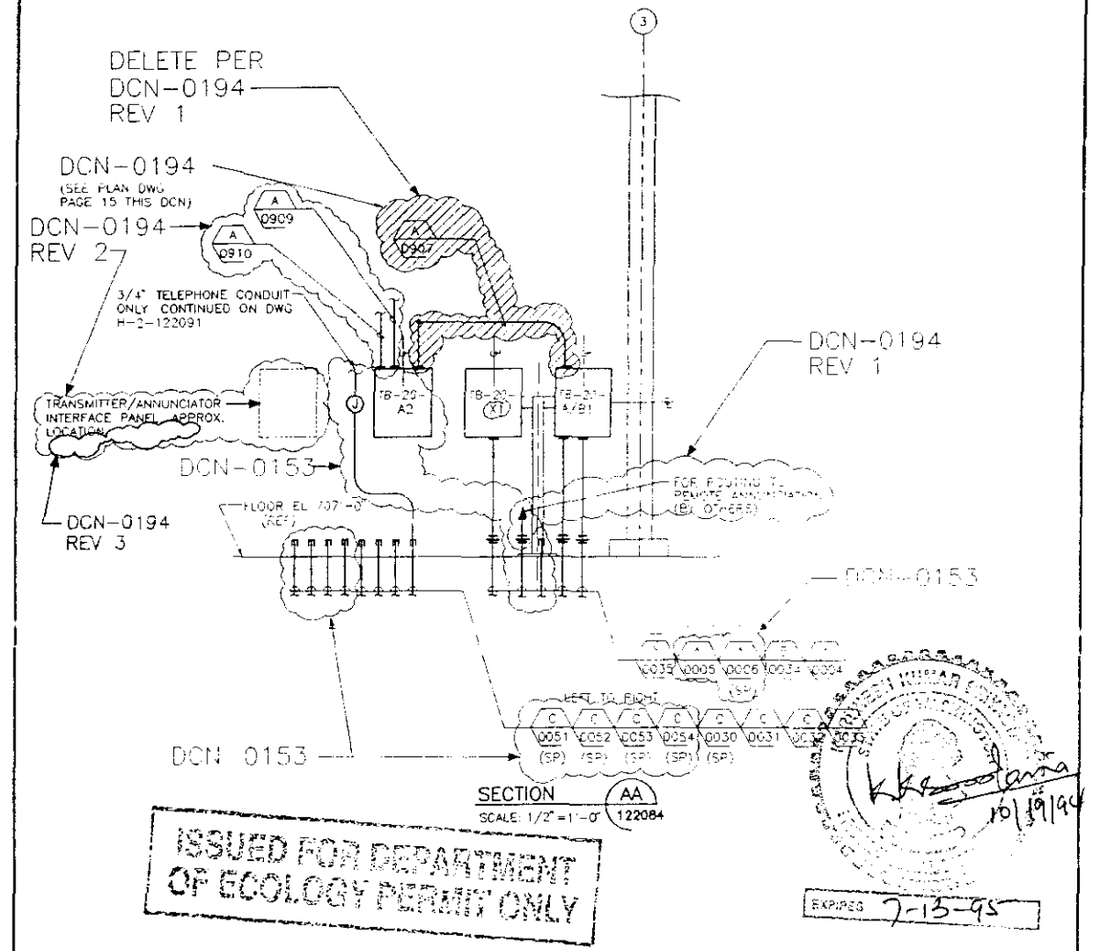


PLAN
FIRE WATER PUMP HOUSE
BUILDING NO. 20

KARUNESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
EXPIRES 7-13-95
10/19/94

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

FLUOR DANIEL — U.S. DEPARTMENT OF ENERGY, HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: DELETED HEAT TRACE ON LINE DRX-4"-530-009-G		BASE DOC. NO. H-2-122088 SHT/PG. 2 REV. 0 CR NO. HWVP-1111 & 1124 DISCIPLINE: ELECTRICAL
PREPARED BY: K. Srivastava	DATE: 8/29/94	DCN-0194 — REV. 3 — PAGE 16
DISCIPLINE ENGINEER: McRoney	DATE: 8-29-94	



FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: ANNUNCIATOR INTERFACE PANEL		BASE DOC. NO. H-2-122094 SHT/PG. 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE ELECTRICAL
PREPARED BY:	DATE: 8/29/94	DCN-0194 REV. 3 PAGE 17
DISCIPLINE ENGINEER:	DATE: 8-29-94	

9516556.2145

DA-32A-852

HEAT TRACING PANEL "C"

DCN-0194

VOLTS 208Y/120 V 3PH 4 WIRES — PANEL DA-32A-852 — MTG SURFACE

MAIN 100AF,50AT M/B ☒ MLO ☐ — LOCATION BLDG 20

LOCATION	WATTS ø A	WATTS ø B	WATTS ø C	LTG	RCPT	MISC	CKT	BKR		BKR	CKT	MISC	RCPT	LTG	WATTS ø A	WATTS ø B	WATTS ø C	LOCATION
HEAT TRACING	1380					2	1	20		20	2	1			500			HEAT TRACING
HEAT TRACING		1200				2	3	20		20	4					500		SPARE
HEAT TRACING			1420			3	5	20		20	6	3					200	HEAT TRACING
SPARE	500						7	20		20	8				500			SPARE
SPARE		500					9	20		20	10					500		SPARE
SPARE			500				11	20		20	12						500	SPARE
SUBTOTALS	1880	1700	1920												1000	1000	700	SUBTOTALS

TOTAL NON-LCL	=	3500	X	1.00	= 3500
TOTAL LCL	=	4700	X	1.25	= 5875
				TOTAL	= 9375

2 2 2

DCN-0194 1

HEAT TRACING

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

10/19/94

EXPIRES 7-13-95

FLUOR DANIEL — U.S. DEPARTMENT OF ENERGY, HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: DELETED HEAT TRACING LOAD ON CIRCUIT C5 FOR DRX-4"-530-009-G		BASE DOC. NO. H-2-122098; SHT/PG. 1; REV. 2; CR NO HWVP-1111 & 1124; DISCIPLINE: ELECTRICAL
PREPARED BY:	DATE 8/29/94	DCN-0194 — REV 3 — PAGE 18
DISCIPLINE ENGINEER:	DATE 8-29-94	

9513558.2146

DA-32A-851

POWER PANEL "B"

VOLTS 208Y/120 V 3PH 4 WIRES — PANEL DA-32A-851 — MTG SURFACE

MAIN 100AF,50AT M/B [X] MLO [ ] — LOCATION BLDG 20

LOCATION	WATTS ø A	WATTS ø B	WATTS ø C	LTG	RCPT	MISC	CKT	BRKR	BRKR	CKT	MISC	RCPT	LTG	WATTS ø A	WATTS ø B	WATTS ø C	LOCATION
FIRE WATER RECEPTACLES	360				2		1	20	20	2				100			LSL/H-DRX-501
FIRE WATER RECEPTACLES		360			2		3	20	20	4	1				50		HEAT TRACING
RECTIFIER			720			1	5	20	20	6	1					200	FIRE ALARM PNL (NOTE 2)
LP-500-007	500					1	7	20	20	8				360			RECEPTACLE (TRANSMITTER)
SPARE		500					9	20	20	10					500		SPARE
LP-500-002A			100			1	11	20	20	12	1					100	LP-500-002B
SUBTOTALS	860	860	820											460	550	300	SUBTOTALS

TOTAL NON-LCL	=	2080	X	1.00	=	2080
TOTAL LCL	=	1770	X	1.25	=	2213
				TOTAL	=	4293

DCN-0194 REV 1

DCN-0179

DCN-0194 REV 1

POWER

2

1

KAISER-HILL COMPANY

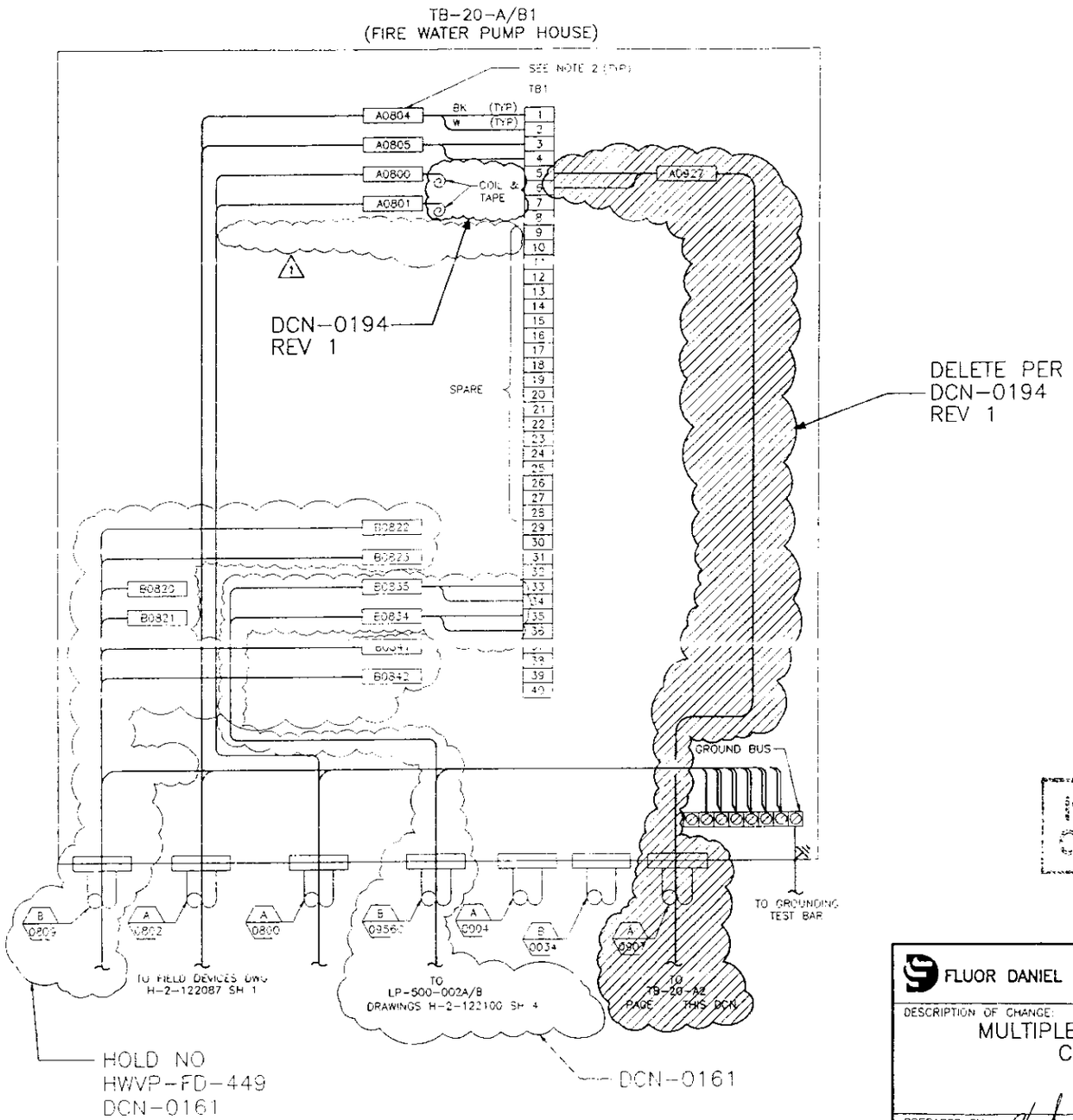
10/19/94

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

7-13-95

FLUOR DANIEL — U.S. DEPARTMENT OF ENERGY, HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS		BASE DOC. NO. H-2-122098; SHT/PG 1; REV. 2; CR NO. HWVP-1124; DISCIPLINE ELECTRICAL
PREPARED BY: S. Spinelli	DATE: 8/29/94	DCN-0194 — REV 3 — PAGE 18A
DISCIPLINE ENGINEER:	DATE: 8-29-94	

9515556.0197



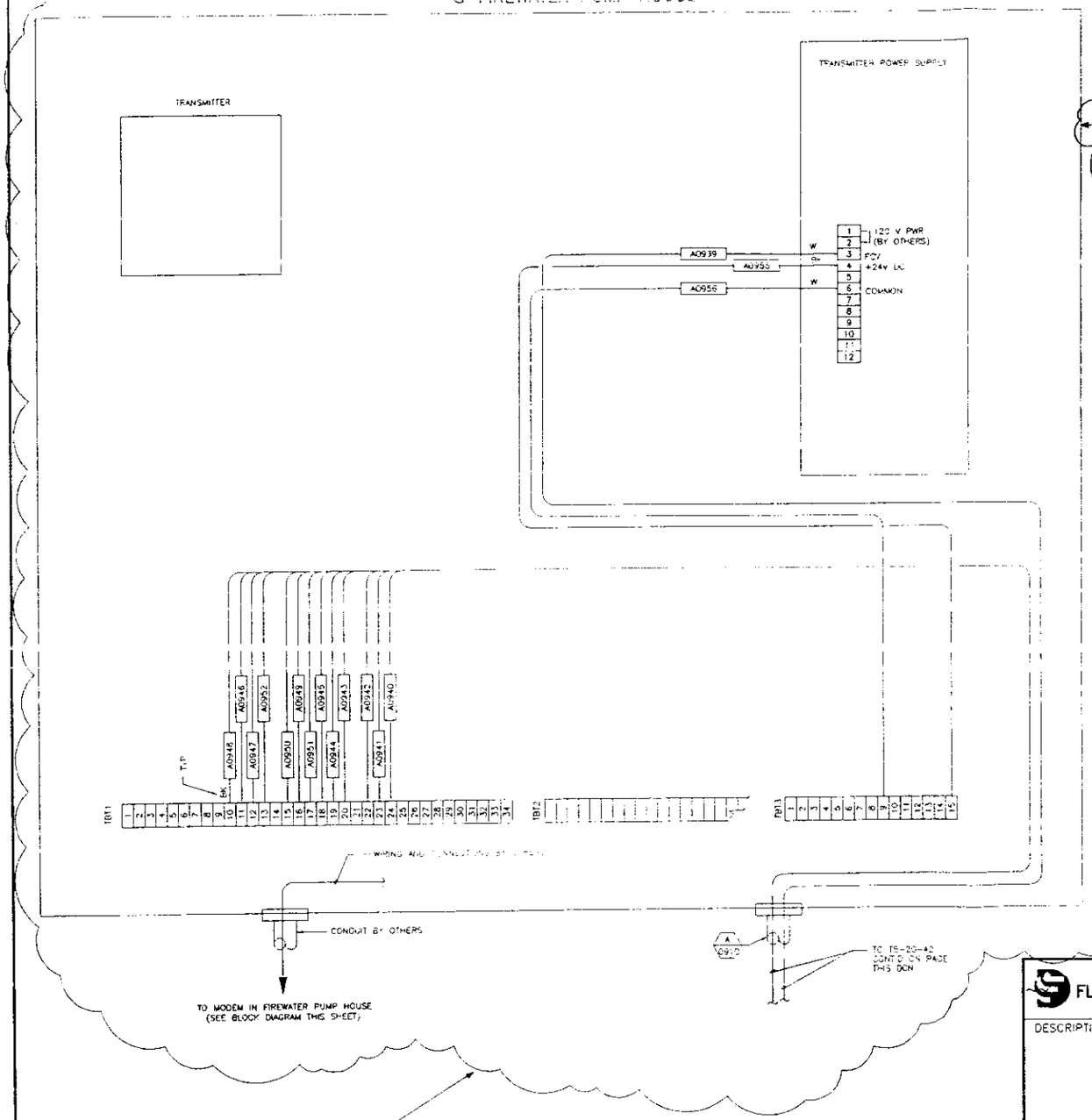
ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

KARUNESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
10/19/94
7-13-95

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS		BASE DOC. NO. H-2-122100 SHT/PG. 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE: ELECTRICAL
PREPARED BY:	DATE: 8/29/94	DCN-0194 REV. 3 PAGE 19
DISCIPLINE ENGINEER:	DATE: 8-29-94	

9513338.2198

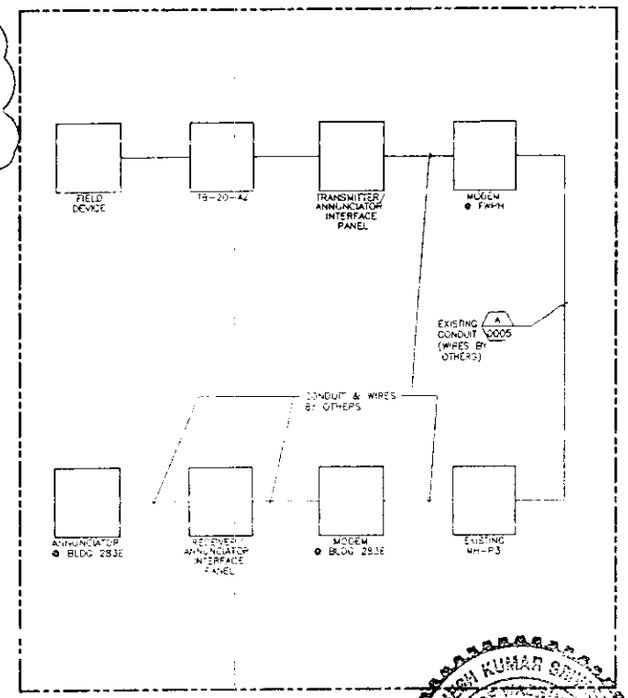
TRANSMITTER/ANNUNCIATOR INTERFACE PANEL @ FIREWATER PUMP HOUSE



DCN-0194 REV 2

DCN-0194 REV 3

NEMA 1 PANEL ENCLOSURE 24" x 20" x 10" w/ INTERIOR PANEL AND LOUVER PLATES AS DETERMINED APPROPRIATE BY GENERAL CONTRACTOR DUE TO SPACE LIMITATIONS.



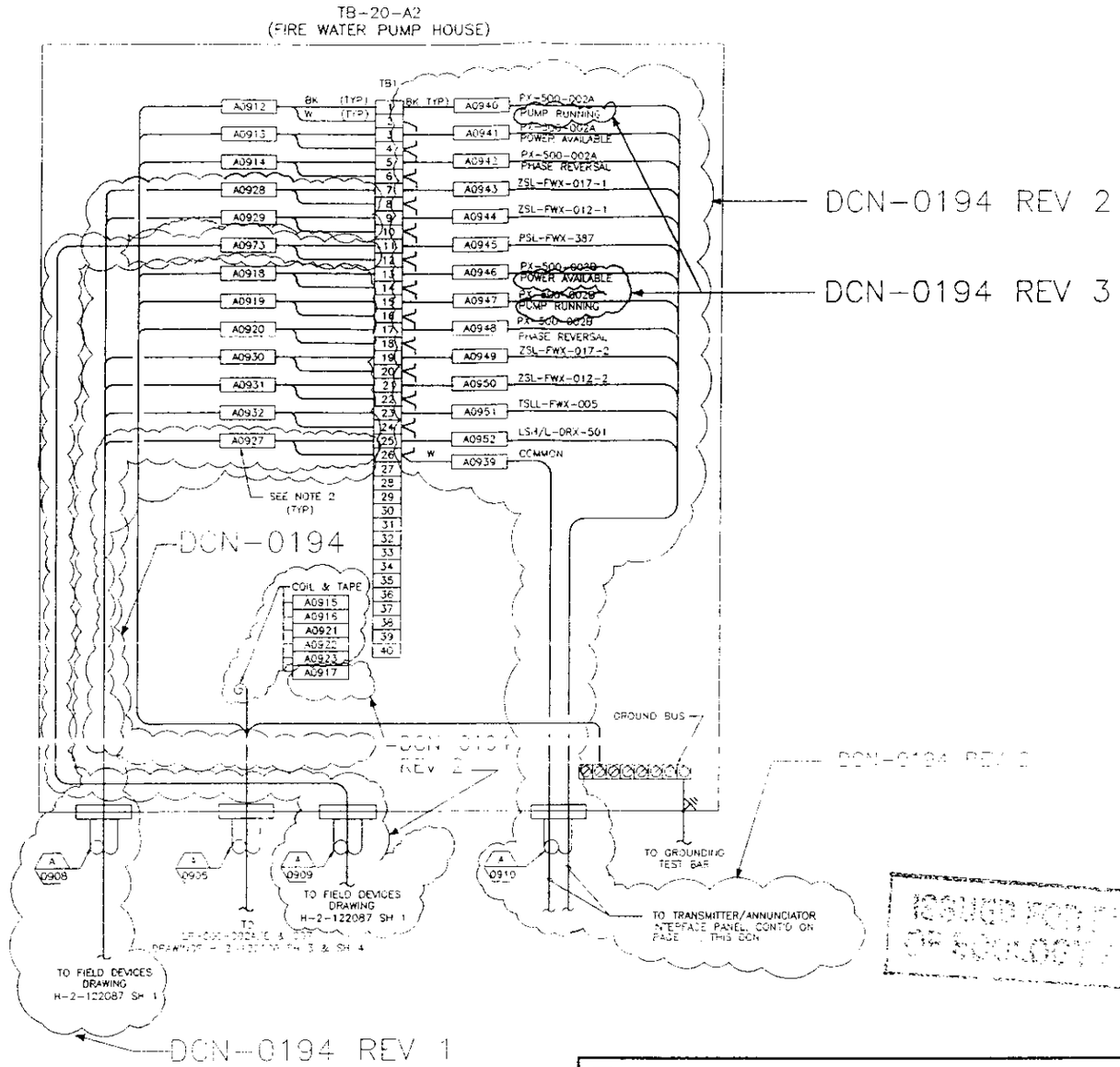
ANNUNCIATION BLOCK DIAGRAM

ARUNDHATI KUMAR SRIVASTAVA STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER 10/19/94

ISSUED FOR CONSTRUCTION OF ECOLOGY ... ONLY EXPIRES 2-13-95

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: ANNUNCIATOR INTERFACE PANEL		BASE DOC NO. H-2-122100 SHT/PG. 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE ELECTRICAL
PREPARED BY: A. Agnihotri	DATE 8/29/94	DCN-0194 REV 3 PAGE 19A
DISCIPLINE ENGINEER:	DATE 8-29-94	

9513338.2149



DCN-0194 REV 2

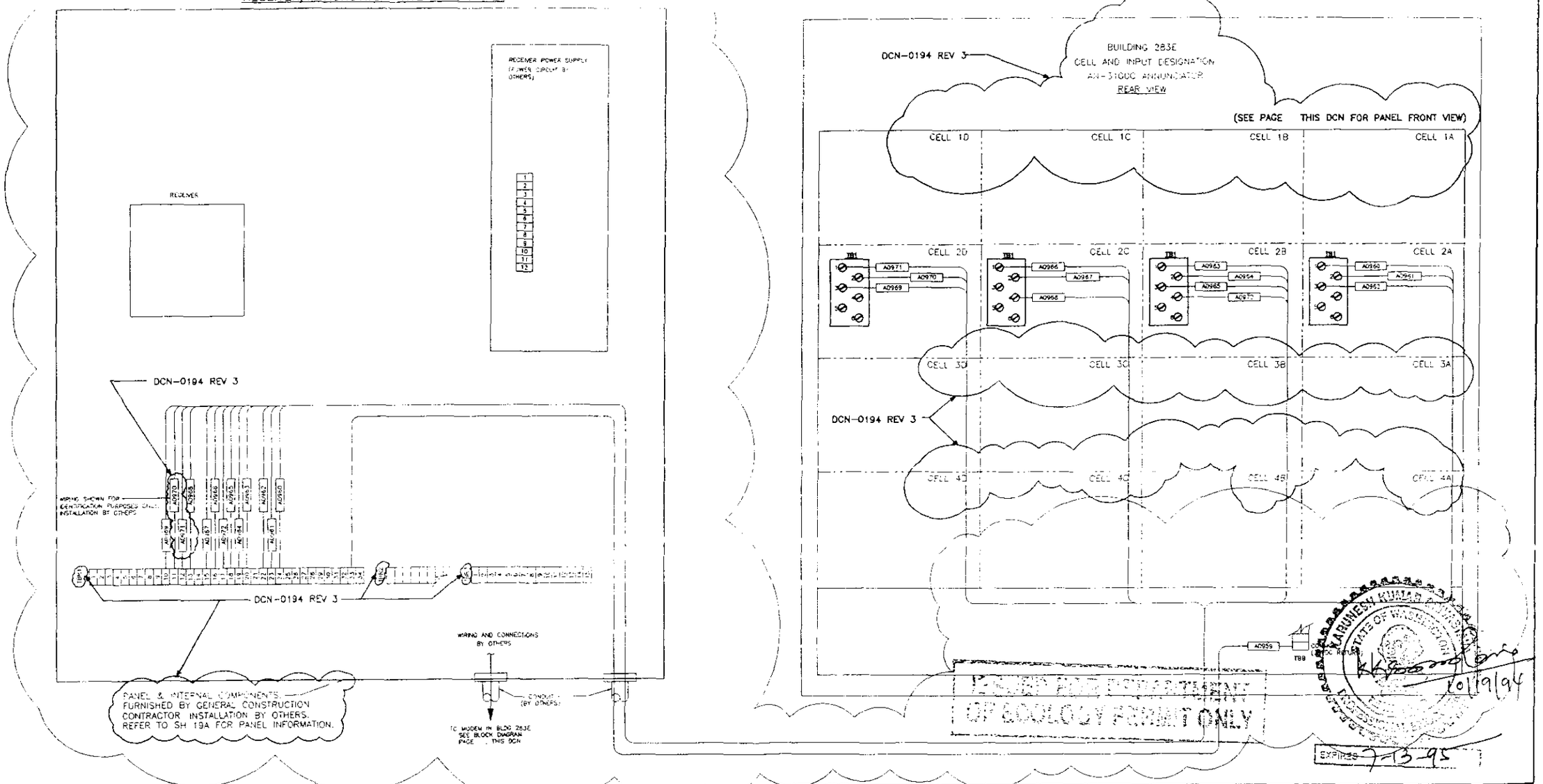
ISSUED FOR INFORMATION OR SECURITY PURPOSES ONLY

10/19/94

7-13-95

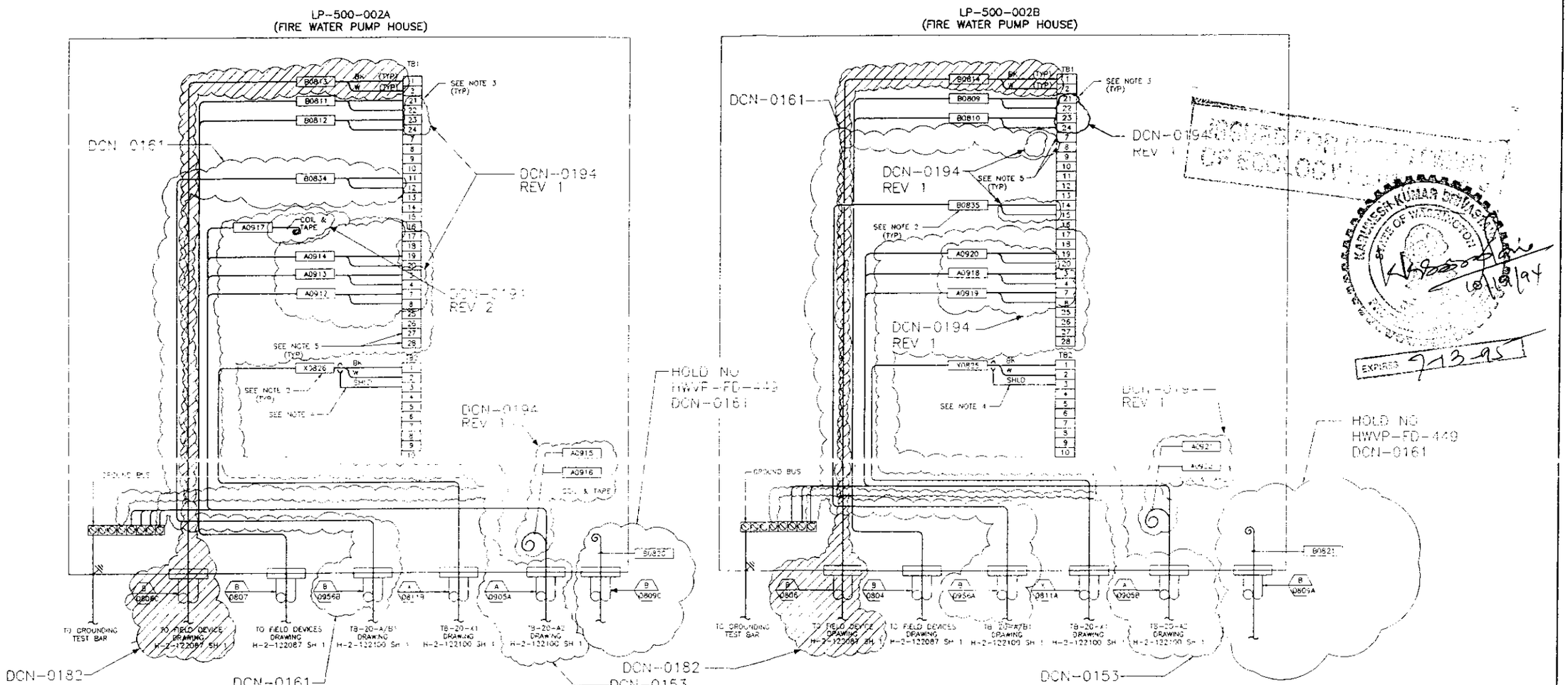
FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE		
DESCRIPTION OF CHANGE: ANNUNCIATOR INTERFACE PANEL		BASE DOC. NO. H-2-122100 SHT/PG. 1 REV 1 CR NO HWVP-1124 DISCIPLINE: ELECTRICAL		
PREPARED BY:	DATE 8/29/94	DCN-0194	REV. 3	PAGE 20
DISCIPLINE ENGINEER:	DATE 8-29-94			

RECEIVER/ANNUNCIATOR INTERFACE PANEL



FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: ANNUNCIATOR INTERFACE PANEL		BASE DOC NO. H-2-122100 SHT/PG. 1 REV. 1 CR NO. HWVP-1124 DISCIPLINE ELECTRICAL
PREPARED BY	DATE: 8/29/94	DCN-0194 REV 3 PAGE 19B
DISCIPLINE ENGINEER:	DATE: 8-29-94	

9513338.2151



NOTES:

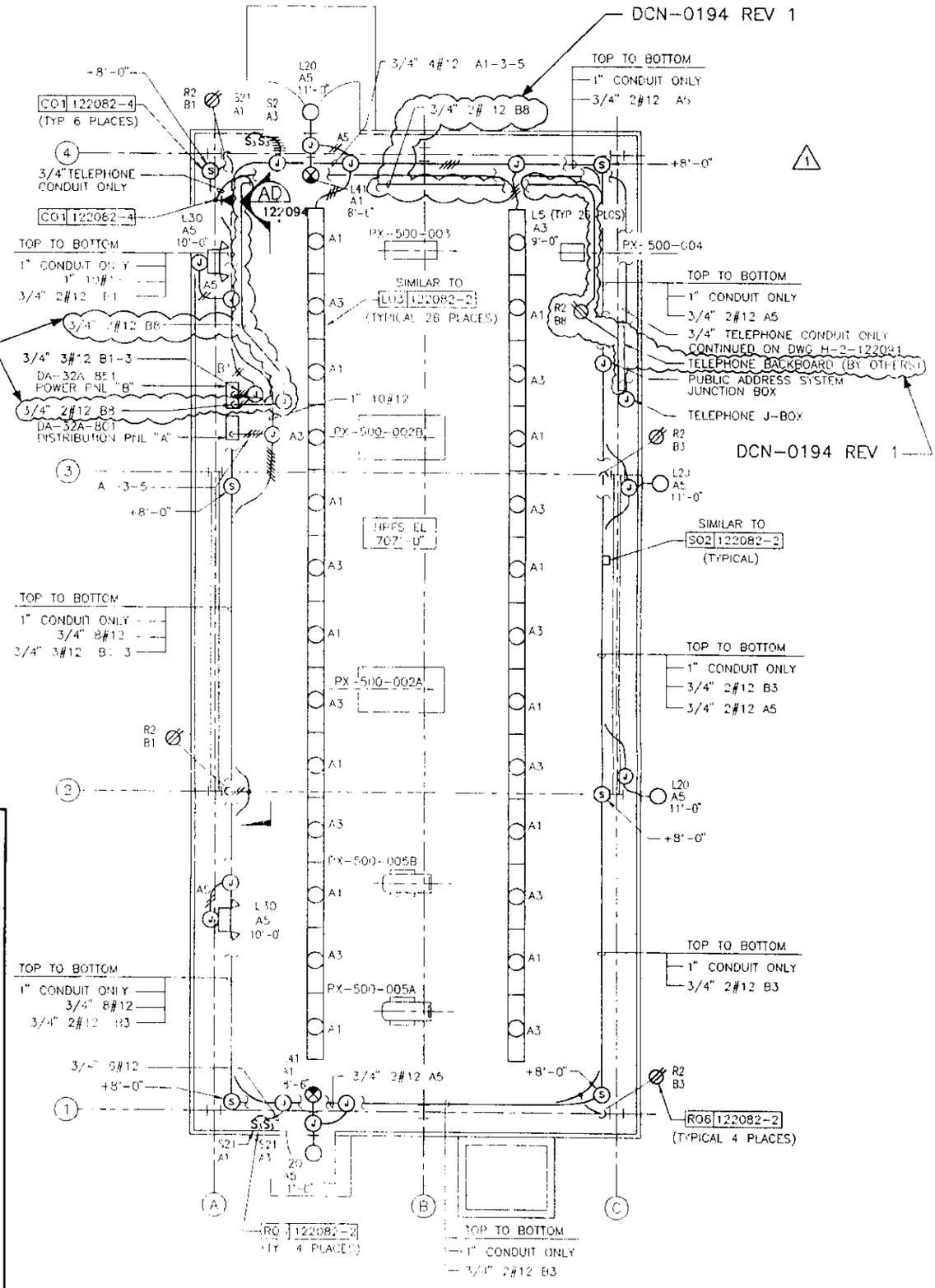
5. FINAL TERMINATION POINTS FOR CONDUCTORS SHALL BE DETERMINED UPON RECEIPT OF FINAL VENDOR INFORMATION.

DCN 0153

DELETE

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: ANNUNCIATOR INTERFACE PANEL		BASE DOC. NO. H-2-122100 SHT/PG. 4 REV. 0 CR NO. HWVP-1124 DISCIPLINE: ELECTRICAL
PREPARED BY: H. Spurgeon	DATE: 8/29/94	DCN-0194 | REV. 3 | PAGE 20A
DISCIPLINE ENGINEER: [illegible]	DATE: 8-29-94	

JTW



PLAN
FIRE WATER PUMP HOUSE
BLDG NO 20

FLUOR DANIEL

U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESCRIPTION OF CHANGE
MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS

PREPARED BY: DATE 8/29/94
DISCIPLINE ENGINEER: DATE 8-29-94

DESIGN CHANGE NOTICE

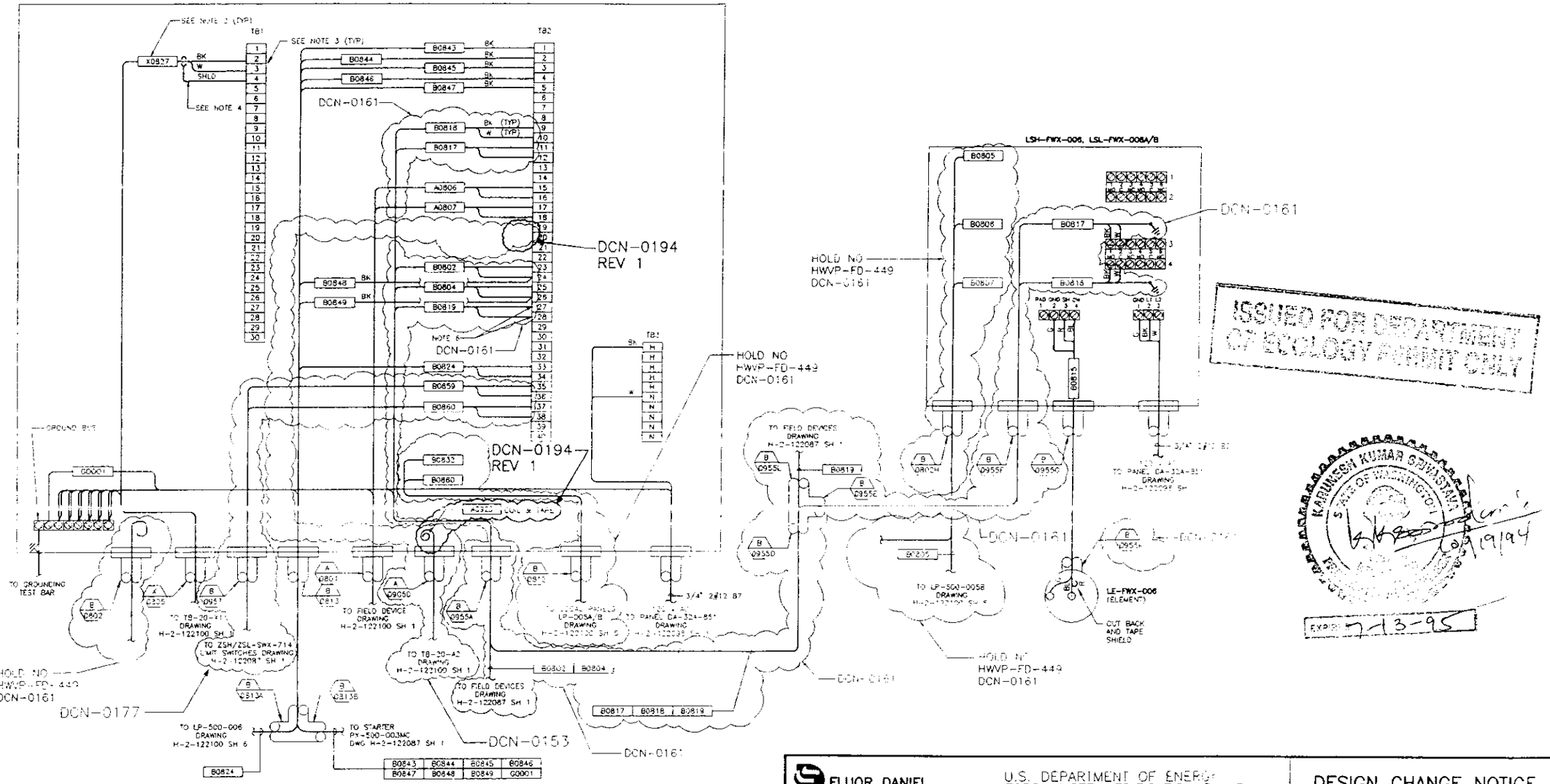
BASE DOC. NO. H-2-122091
SHT/PG 1 REV. 1
CR NO. HWVP-1124
DISCIPLINE ELECTRICAL

DCN-0194 REV. 3 PAGE 208

EXPIRES 7-15-95

9513338.2153

LP-500-007
(FIRE WATER PUMP HOUSE)



ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

KARUNESH KUMAR SRIVASTAVA
STATE OF WASHINGTON
09/19/94
EXPIRES 7-13-95

FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE
DESCRIPTION OF CHANGE: MULTIPLEXER POWER SUPPLY/NORMALLY CLOSED CONTACT SIGNALS		BASE DOC. NO. H-2-122100 SHT/PG. 3 REV. 0 CR NO. HWVP-1124 DISCIPLINE ELECTRICAL
PREPARED BY: A. Srivastava	DATE: 8/29/94	DCN-0194
DISCIPLINE ENGINEER: R. Ethridge	DATE: 8-29-94	REV 3 / PAGE 20C