WIRE RUN NO.	NO. OF WIRES	SIZE OF WIRE	TYPE OF WIRE	FROM	VIA	TO	WIRE NUMBERS
GWD50	3-1/C	2	6	POLE P17A	P50	MH 104(LBC)	PH-A, PH-B, PH-C
GWD51	3-1/C	2	6	MH 104(LBC)	EXST P14	MH 103(LBC)	PH-A, PH-B, PH-C
GWD52	3-1/C	2	6	MH 103(LBC)	P40	MH 102A(LBC)	PH-A, PH-B, PH-C
GWD53	3-1/C	2	6	MH 102A(LBC)	P53	VAULT TRANSFORMER	PH-A, PH-B, PH-C
GWD54	3-1/C	2	6	MH 103(LBC)	EXST P8	MH 102(LBC)	PH-A, PH-B, PH-C
GWD55	3-1/C	2	6	MH 102(LBC)	P44	MH 103A(LBC)	PH-A, PH-B, PH-C
GWD56	2-25/C	14	9	ANN-TBX-103 (MH 103)	MH 103, EXST C12, MH 102	ANN-TBX-102 (MH 102)	ANN-103 THRU -119,-121,-123,-125,-127,-129,-131,-133,-153 THRU -156,(4)-DC+,GND,(17) SPARE
GWD57	16PR	20	4	TE-102-1 JB	I24, I-PB-102-1, I24A	TE-TBX-102	TE-102-1-1(+) & (-) THRU TE-102-1-16(+) & (-), SHLD
GWD58	16PR	20	4	TE-102-2 JB	I25, I-PB-102-1, I25A	TE-TBX-102	TE-102-2-1(+) & (-) THRU TE-102-2-16(+) & (-), SHLD
GWD59	16PR	20	4	TE-102-3 JB	I26, I-PB-102-1, I26A	TE-TBX-102	TE-102-3-1(+) & (-) THRU TE-102-3-16(+) & (-), SHLD
GWD60	16PR	20	4	TE-102-4 JB	I27, I-PB-102-1, I27A	TE-TBX-102	TE-102-4-1(+) & (-) THRU TE-102-4-16(+) & (-), SHLD
GWD61	4PR	20	7	I-TB-LS-102	I32B, I-PB-LS-102, I32, I-PB-102-1, I32A	TE-TBX-102	TE-LS-102-1(+),-1(-),-2(+),-2(-),-SP-3(+),-SP-3(-),-SP-4(+),-SP-4(-), SHLD
GWD62	25/C	14	9	ANN-TBX-103 (MH 103)	MH 103, C43, MH 102A	ANN-TBX-102A (MH 102A)	ANN-102,-120,-122,-124,-126,-128,-130,-132,-135,-137,-139,-141,-143,-144,-151,-152,(2)-DC+,GND,(6)SPARE
GWD63	-	-	8	I-TB-LS-102	I33B, I-PB-LS-102, I33, I-PB-102-2, I33A, CABLE CONNECTOR	LIT-LS-102	LIT-LS-102-8,-9,-10,-11,-12 (CABLE INSTALLATION BY OTHERS)
GWD64	4/C	16	2	I-TB-LS-102	I34B, I-PB-LS-102, I34, I-PB-102-2, I34A	LDK-LS-102	LDK-LS-102-14,-14A,-15, GND
GWD71	3/C	12	2	TB-P-102A (MH 102A)	MH 102A, P48, C/P-PB-102-1, P48A	(102) LEACHATE SUMP PUMP CONTROLLER	D-PB-01-13A,-13B,GND
GWD72	3/C	12	2	LDK-LS-102	I34A, I-PB-102-2, C51, MH102A	ANN-TBX-102A (MH 102A)	ANN-DC+,ANN-102,GND
GWD73	16PR	20	4	TE-103-1 JB	I28, I-PB-103-1, I28A	TE-TBX-103	TE-103-1-1(+) & (-) THRU TE-103-1-16(+) & (-), SHLD
GWD74	16PR	20	4	TE-103-2 JB	I29, I-PB-103-1, I29A	TE-TBX-103	TE-103-2-1(+) & (-) THRU TE-103-2-16(+) & (-), SHLD
GWD75	16PR	20	4	TE-103-3 JB	I30, I-PB-103-1, I30A	TE-TBX-103	TE-103-3-1(+) & (-) THRU TE-103-3-16(+) & (-), SHLD
GWD76	16PR	20	4	TE-103-4 JB	I31, I-PB-103-1, I31A	TE-TBX-103	TE-103-4-1(+) & (-) THRU TE-103-4-16(+) & (-), SHLD
GWD77	4PR	20	7	I-TB-LS-103	I35B, I-PB-LS-103, I35, I-PB-103-1,I35A	TE-TBX-103	TE-LS-103-1(+),-1(-),-2(+),-2(-),-SP-3(+),-SP-3(-),-SP-4(+),-SP-4(-), SHLD
GWD78	25/C	14	9	ANN-TBX-102 (MH 102)	MH 102, C47, MH 103A	ANN-TBX-103A (MH 103A)	ANN-103,-104,-106,-108,-110,-112,-114,-116,-118,-121,-123,-125,-127,-129,-131,-133,-153,-154, (2)-DC+,(4) SPARE,GND
GWD79	-	-	8	I-TB-LS-103	I36B, I-PB-LS-103, I36, I-PB-103-2, I36A, CABLE CONNECTOR	LIT-LS-103	LIT-LS-103-8,-9,-10,-11,-12 (CABLE INSTALLATION BY OTHERS)
GWD80	3/C	16	2	I-TB-LS-103	I37B, I-PB-LS-103, I37, I-PB-103-2, I37A	LDK-LS-103	LDK-LS-103-14,-14A,-15
GWD81	2/C	16	2	ANNUNCIATOR	EXST C33, MH 103, EXST C12, MH 102, EXST C8, MH 101, EXST C5	CASS TBX	A-A-247-16, -C3
GWD82	3	12	1	P-TBX-103 (MH 103)	EXST C33, GROUT DISPOSAL FACILITY ANN, CND NIPPLE	FUSE ENCLOSURE	D-PB-01-13B,-13C,GND
GWD83	3-25/C	14	9	ANN-TBX-103 (MH 103)	EXST C32	GROUT DISPOSAL FACILITY ANNUNCIATOR	ANN-102 THRU -156, (6)-DC+,GND,(13)SPARE
GWD84	3	12	1	FUSE ENCLOSURE	NIPPLE	ANNUNN TRANSFORMER	B,C,GND
GWD85	3	12	1	ANN TRANSFORMER	NIPPLE, FUSE ENCLOSURE, NIPPLE	GROUT DISPOSAL FACILITY ANNUNCIATOR	H, X2, GND
GWD87	3/C	12	2	TB-P-103A (MH 103A)	MH 103A, P49, C/P-PB-103-1, P49A	(103) LEACHATE SUMP PUMP CONTROLLER	D-PB-01-13A,-13B,GND
GWD88	3/C	12	2	LDK-LS-103	I37A, I-PB-103-2, C52, MH103A	ANN-TBX-103A (MH 103A)	ANN-DC+,ANN-103,GND
GWD89	4-1/C	6	1	P-TBX-103(MH 103)	MH 103, P41, MH 102A	TB-P-102A(MH 102A)	D-PB-01-13A,-13B,-13C,GND
GWD90	4-1/C	6	1	P-TBX-103(MH 103)	MH 103, EXST P6, MH 102	TB-P-102(MH 102)	D-PB-01-13A,-13B,-13C,GND
GWD91	4-1/C	6	1	P-TBX-102(MH 102)	MH 102, P45, MH 103A	TB-P-103A(MH 103A)	D-PB-01-13A,-13B,-13C,GND
GWD92	2-3/C	12	2	P-TB-LS-102	P64B, P-PB-LS-102, P64, C/P-PB-102-1, P64A	(102) LEACHATE SUMP PUMP CONTROLLER	P-LS-102A-A(+)-A(-)-GND; P-LS-102B-A(+)-A(-)-GND
GWD93	2-3/C	12	2	P-TB-LS-103	P65B, P-PB-LS-103, P65, C/P-PB-103-1, P65A	(103) LEACHATE SUMP PUMP CONTROLLER	P-LS-103A-A(+)-A(-)-GND; P-LS-103B-A(+), A(-)-GND
GWD94	3	12	1	(102) LEACHATE SUMP PUMP CONT	3/4" NIPPLE	(102) 3KVA XFMR PRIMARY	H1,H2,GND
GWD95	3	12	1	(102) 3KVA XFMR SECONDARY	3/4" NIPPLE	(102) LEACHATE SUMP PUMP CONTROLLER	X1, ACN, GND
GWD96	3	12	1	(102) LEACHATE SUMP PUMP CONT	3/4" NIPPLE	LDK-LS-102	AC1, ACN, GND
GWD97	3	12	1	LDK-LS-102	3/4" NIPPLE	LDK-LP-102	AC1, ACN, GND
GWD98	3	12	1	LDK-LP-102	3/4" NIPPLE	(102) HORN	LDK-LP-102-8, -11,GND
GWD99	4/C	16	2	LDK-LP-102	3/4" NIPPLE, LDK-LS-102, I34A, I-PB-102-2, I34, I-PB-LS-102, I34B	I-TB-LS-102	LDK-LP-102-14,-14A,-15,GND
GWD100	3	12	1	(102) LEACHATE SUMP PUMP CONT	3/4" NIPPLE	LIT-LS-102-1A OR 1B	AC1, ACN, GND
GWD101	3	12	1	(103) LEACHATE SUMP PUMP CONT	3/4" NIPPLE	(103) 3KVA TRANSFORMER PRIMARY	H1,H2,GND
GWD102	3	12	1	(103) 3KVA XFMR SECONDARY	3/4" NIPPLE	(103) LEACHATE SUMP PUMP CONTROLLER	X1, ACN, GND
GWD103	3	12	1	(103) LEACHATE SUMP PUMP CONT	3/4" NIPPLE	LDK-LS-103	AC1, ACN, GND
GWD104	3	12	1	LDK-LS-103	3/4" NIPPLE	LDK-LP-103	AC1, ACN, GND
GWD105	3	12	1	(103) LEACHATE SUMP PUMP CONT	3/4" NIPPLE	LIT-LS-103-1A OR 1B	AC1, ACN, GND
GWD106	3	12	1	LDK-LP-103	3/4" NIPPLE	(103) HORN	LDK-LP-103-8,-11,GND
GWD107	4/C	16	2	LDK-LP-103	3/4" NIPPLE, LDK-LS-103, I37A, I-PB-103-2, I37, I-TB-LS-103, I37B	I-TB-LS-103	LDK-LP-103-14,-14A,-15,GND
GWD110	3-1/C	2	6	MH-103A (LBC)	P55	225KVA TRANSFORMER	PH A, PH B, PH C (CABLE INSTALLATION BY OTHERS)
GWD111	4PR	20	7	TE-TBX-103 TERM BLK	INTERNAL	J-TE-103-5	TE-LS-103-1(+),-1(-),-2(+),-2(-),-SP-3(+),-SP-3(-),-SP-4(+),-SP-4(-)
GWD112	16PR	20	4	TE-TBX-102 TERM BLK	INTERNAL	J-TE-102-1	TE-102-1-1(+) &(-) THRU TE-102-1-16(+), &(-)
GWD113	16PR	20	4	TE-TBX-102 TERM BLK	INTERNAL	J-TE-102-2	TE-102-2-1(+) &(-) THRU TE-102-2-16(+), &(-)
GWD114	16PR	20	4	TE-TBX-102 TERM BLK	INTERNAL	J-TE-102-3	TE-102-3-1(+) &(-) THRU TE-102-3-16(+), &(-)
GWD115	16PR	20	4	TE-TBX-102 TERM BLK	INTERNAL	J-TE-102-4	TE-102-4-1(+) &(-) THRU TE-102-4-16(+), &(-)
GWD116	4PR	20	7	TE-TBX-102 TERM BLK	INTERNAL	J-TE-102-5	TE-LS-102-1(+),-1(-), -2(+),-2(-),-SP-3(+),-SP-3(-),-SP-4(+),-SP-4(-)
GWD117	16PR	20	4	TE-TBX-103 TERM BLK	INTERNAL	J-TE-103-1	TE-103-1-1(+) &(-) THRU TE-103-1-16(+), &(-)
GWD118	16PR	20	4	TE-TBX-103 TERM BLK	INTERNAL	J-TE-103-2	TE-103-2-1(+) &(-) THRU TE-103-2-16(+), &(-)
GWD119	16PR	20	4	TE-TBX-103 TERM BLK	INTERNAL	J-TE-103-3	TE-103-3-1(+) &(-) THRU TE-103-3-16(+), &(-)
GWD120	16PR	20	4	TE-TBX-103 TERM BLK	INTERNAL	J-TE-103-4	TE-103-4-1(+) &(-) THRU TE-103-4-16(+), &(-)
GWD121	3	COAX	3	MH 102A WW	I20	MH 103 WW	CABLES I-XC-01A-3,-4,-5
GWD122	2	COAX	3	MH 103 WW	EXST I5	MH 102 WW	CABLES I-XC-01A-4,-5
GWD123	2	COAX	3	MH 102 WW	EXST I3	MH 101 WW	CABLES I-XC-01A-4,-5
GWD124	2	COAX	3	MH 101 WW	EXST I1, SPARE TBX, EXST CND	TGE CONTROL ROOM	CABLES I-XC-01A-4,-5
GWD124A	3	COAX	3	MH 103A WW	I22	MH 102 WW	CABLES I-XC-01A-6,-7,-8
GWD124B	3-6PR	24	5	MH 102A WW	I20	MH 103 WW	CABLES I-CDL-01-3,-4,-5
GWD124C	2-6PR	24	5	MH 103 WW	EXST I5	MH 102 WW	CABLES I-CDL-01-4,-5
GWD124D	2-6PR	24	5	MH 102 WW	EXST I3	MH 101 WW	CABLES I-CDL-01-4,-5
GWD124E	2-6PR	24	5	MH 101 WW	EXST I1, SPARE TBX, EXST CND	TGE CONTROL ROOM	CABLES I-CDL-01-4,-5
GWD124F	3-6PR	24	5	MH 103A WW	I22	MH 102 WW	CABLES I-CDL-01-6,-7,-8

CONDUIT SCHEDULE

CND NO.	CND SIZE	WIRE RUN NUMBERS
P40	4"	GWD52
P41	4"	GWD89
P42	4"	SPARE
P43	4"	SPARE
P44	4"	GWD55
P45	4"	GWD91
P46	4"	SPARE
P47	4"	SPARE
P48	1"	GWD71
P48A	1"	GWD71
P49	1"	GWD87
P49A	1"	GWD87
P50	4"	GWD50
P51	4"	SPARE
P52	4"	SPARE
P53	4"	GWD53
P54	4"	SPARE
P55	4"	GWD110
P56	4"	SPARE
P57	4"	SPARE
P58	4"	SPARE
P59	4"	SPARE
P60	4"	SPARE
P61	4"	SPARE
P62	4"	SPARE
P63	4"	SPARE
P64	1-1/2"	GWD92
P64A	1-1/2"	GWD92
P64B	1-1/2"	GWD92
P65	1-1/2"	GWD93
P65A	1-1/2"	GWD93
P65B	1-1/2"	GWD93
P6*	4"	GWD90
P8*	4"	GWD54
P14*	4"	GWD51
C5*	2"	GWD81
C8*	4"	GWD81
C12*	4"	GWD56,GWD81
C32*	4"	GWD83
C33*	4"	GWD81,GWD82
I1*	2"	GWD124,GWD124E
I3*	4"	GWD123,GWD124D
I5*	4"	GWD122,GWD124C

CONDUIT SCHEDULE

CND NO.	CND SIZE	WIRE RUN NUMBERS
C43	4"	GWD62
C44	4"	SPARE
C45	4"	SPARE
C46	4"	SPARE
C47	4"	GWD78
C48	4"	SPARE
C49	4"	SPARE
C50	4"	SPARE
C51	1"	GWD72
C52	1"	GWD88
C53	4"	SPARE
C54	4"	SPARE
C55	4"	SPARE
C56	4"	SPARE
C57	4"	SPARE
C58	4"	SPARE
C59	4"	SPARE
C60	4"	SPARE
I20	4"	GWD121,GWD124B
I21	4"	SPARE
I22	4"	GWD124A,GWD124F
I23	4"	SPARE
I24	1"	GWD57
I24A	1"	GWD57
I25	1"	GWD58
I25A	1"	GWD58
I26	1"	GWD59
I26A	1"	GWD59
I27	1"	GWD60
I27A	1"	GWD60
I28	1"	GWD73
I28A	1"	GWD73
I29	1"	GWD74
I29A	1"	GWD74
I30	1"	GWD75
I30A	1"	GWD75
I31	1"	GWD76
I31A	1"	GWD76
I32	1"	GWD61
I32A	1"	GWD61
I32B	1"	GWD61
I33	1"	GWD63
I33A	1"	GWD63
I33B	1"	GWD63
I34	1"	GWD64, GWD99
I34A	1"	GWD64, GWD72, GWD99
I34B	1"	GWD64, GWD99
I35	1"	GWD77
I35A	1"	GWD77
I35B	1"	GWD77
I36	1"	GWD79
I36A	1"	GWD79
I36B	1"	GWD79
I37	1"	GWD80, GWD107
I37A	1"	GWD80, GWD88, GWD107
I37B	1"	GWD80, GWD107
I38	4"	SPARE
I39	4"	SPARE
I40	4"	SPARE
I41	4"	SPARE

*FOR EXST CONDUITS SEE SITE PLAN H-2-98473 & WIRE RUN LIST H-2-98477

ABBREVIATIONS

LBC - LOADBREAK CENTER MODULE

TYPE OF WIRE

1. 1/C XHHW/THHN 600V INSULATION, #10AWG & SMALLER SOLID, #8AWG AND LARGER STRANDED.
2. TYPE TC, 600V ROCKBESTOS FIREWALL III
3. COAXIAL CABLE TYPE RG11, BELDEN NO. 8238
4. 16 PR #20 TYPE K THERMOCOUPLE EXTENSION WIRE, ROCKBESTOS FIREWALL III WITH OVERALL SHIELD.
5. 6 SH PR #24 STRANDED COMPUTER CABLE, BELDEN NO. 9731
6. 15KV SHIELDED POWER CABLE/133% INSULATION RATING.
7. 4 PR #20 TYPE KX THERMOCOUPLE EXTENSION WIRE, ROCKBESTOS FIREWALL III WITH OVERALL SHIELD.
8. CABLE PROVIDED BY OTHERS (SEE DWG H-2-77617).
9. 25/C #14 ALPHA XTRA GUARD 2
10. ~~5/8" DIA, 7 STRAND, SPECIAL LOW CARBON GRADE STEEL CABLE. CABLE COATING SHALL BE CLASS B ZINC IN ACCORDANCE WITH ASTM A475.~~

DOES NOT CONTAIN CLASSIFIED OR UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION
Reviewing Official/ADC
Kaiser Engineers Hanford Company
11-26-90
Date

CHARLES L. SUBLETT — STATE OF WASHINGTON — 14516 — REGISTERED PROFESSIONAL ENGINEER
12-12-90 Rev 1

JAN 1991 RECEIVED EDMC

NUMBER	TITLE
H-2-98477	ELEC WIRE RUN LIST
H-2-98473	ELEC SITE & VAULT PL & DET
H-2-77573	DRAWING LIST

REFERENCES — NEXT USED ON — DRAWING TRACEABILITY LIST

REVISIONS:
TEC 6-8-90 — RS1
h) B-714-53
g) B-714-42
f) B-714-30
e) B-714-24
d) B-714-22
c) B-714-17
b) B-714-15
a) B-714-10
THRU B-714-61
GENL REV; INCORP ALL ECN'S

MICROFILMED — WHC APPROVAL — KEH APPROVAL — COMMENT REVIEW

EDT# 101089 — IMPACT LEVEL 2

		DATE
WHC APPROVAL		
BY	SR BRIGGS	12-28 1988
PROJ ENGR	JD CLOUD	12-28 1988
QA	JE BREED	7-14 1988
APPROVED BY	RM ITEN	7-13 1988
SAFETY	D PARTHREE	7-11 1988
APPROVED BY	WCA C SUBLETT	7-11 1988
CHECKED BY	RJ HARMAN	7-11 1988
DRAWN BY	JL BRINKLEY	7-5 1988
DESIGNED BY	JL BRINKLEY	6-30 1988
CAD FILE	B077641A	
CAD CODE	2J:SUN:ACD2:10.0:NN	

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
KAISER ENGINEERS HANFORD COMPANY

ELECTRICAL WIRE RUN LIST

PROJECT TITLE: GROUT VAULT PAIR 218-E-16-102 & 103

PROJ	WO	JOB
B-714	ER1060	242500

SCALE	BLDG	INDEX
NONE	218-E-16	7305

DRAWING NUMBER	SHEET	OF	REV
H-2-77641	1	1	1

KEHCAD

0012509