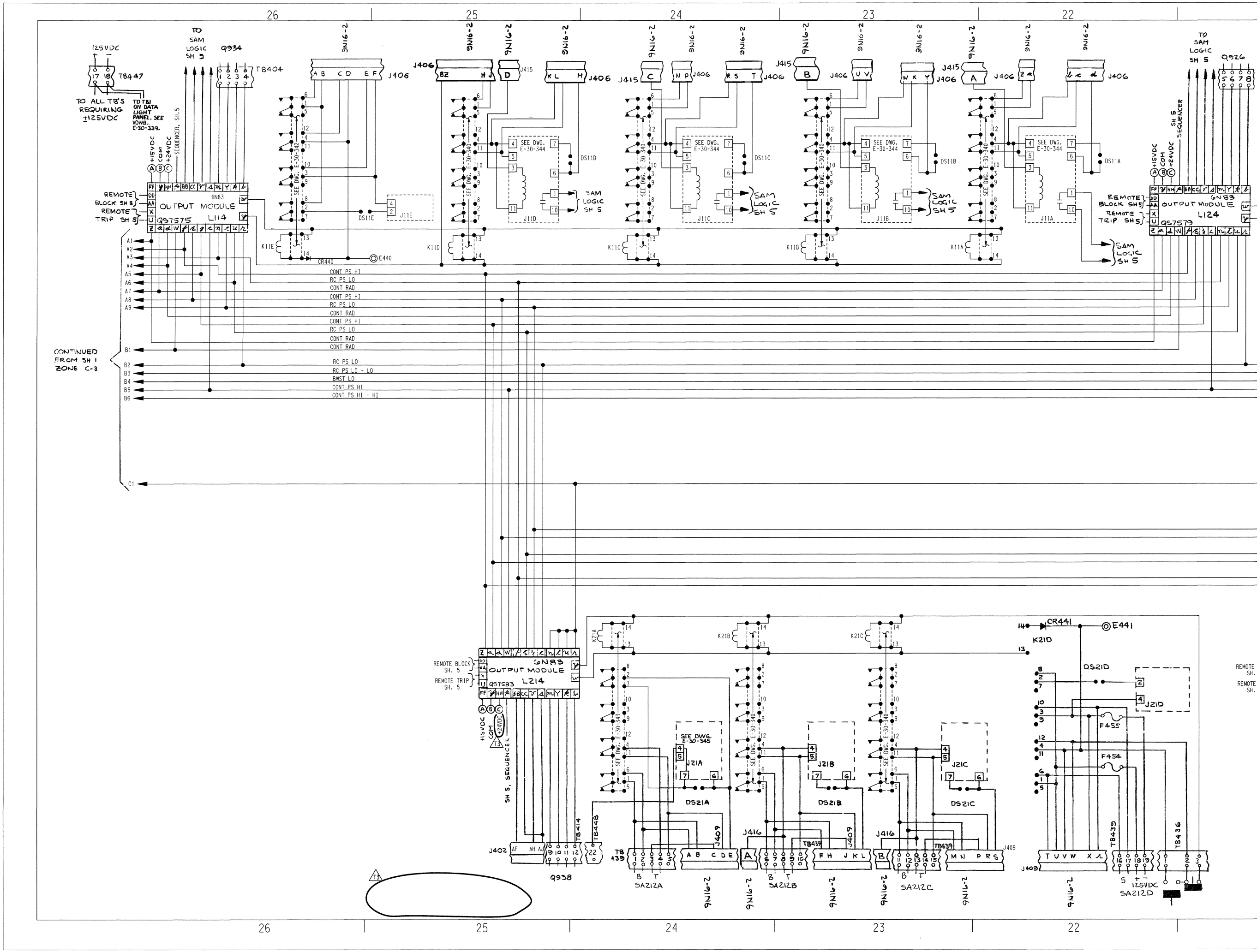
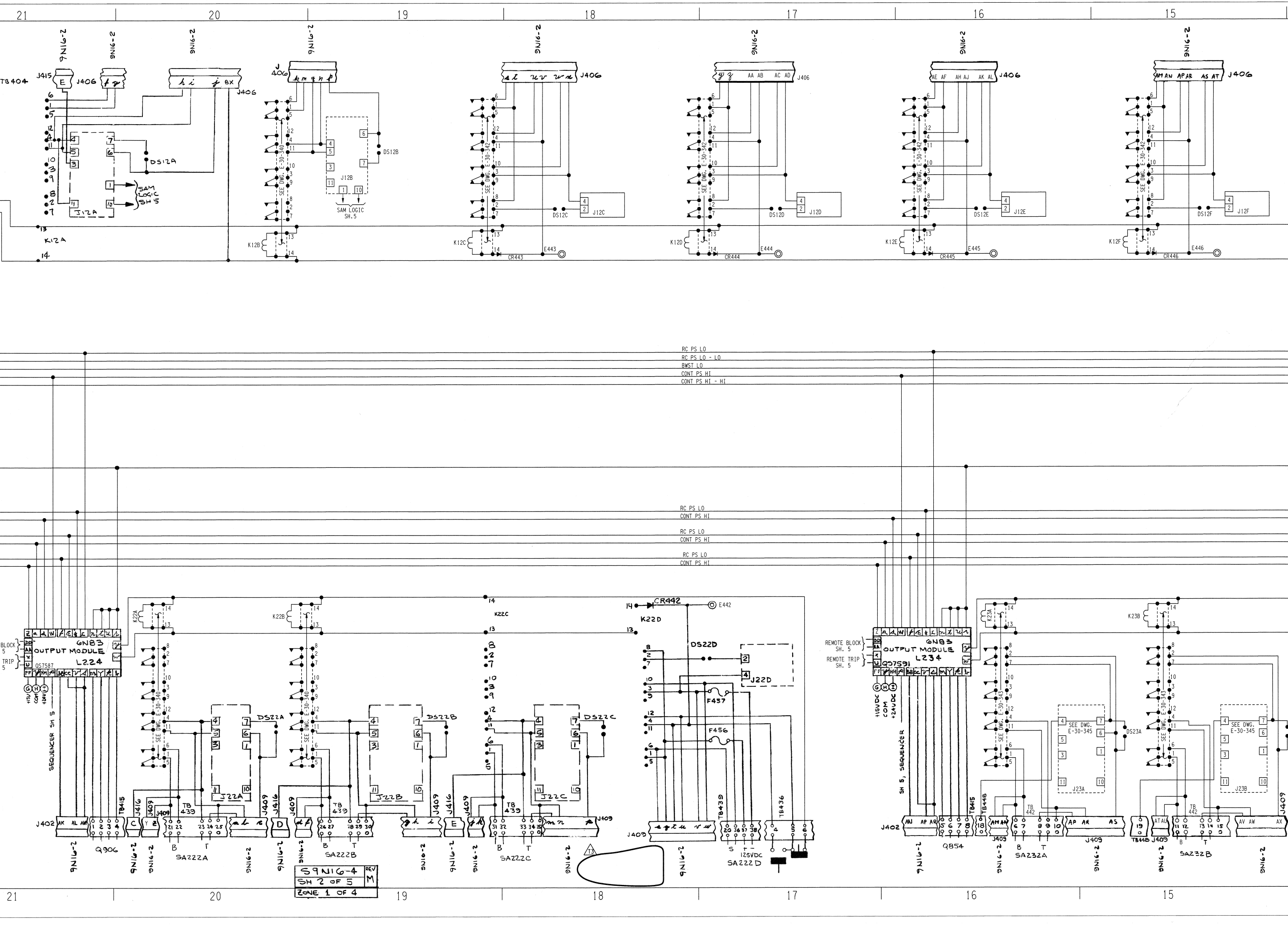
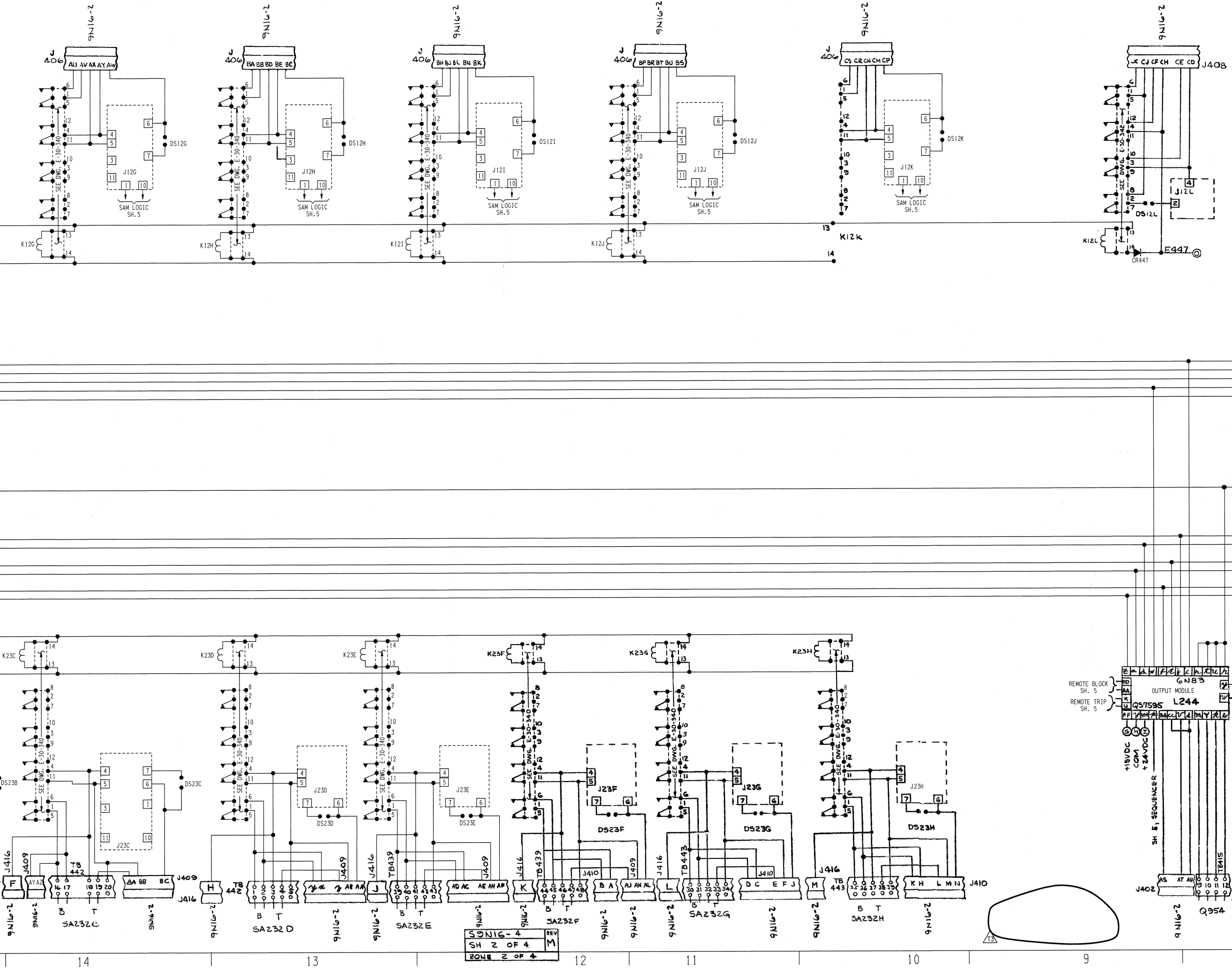


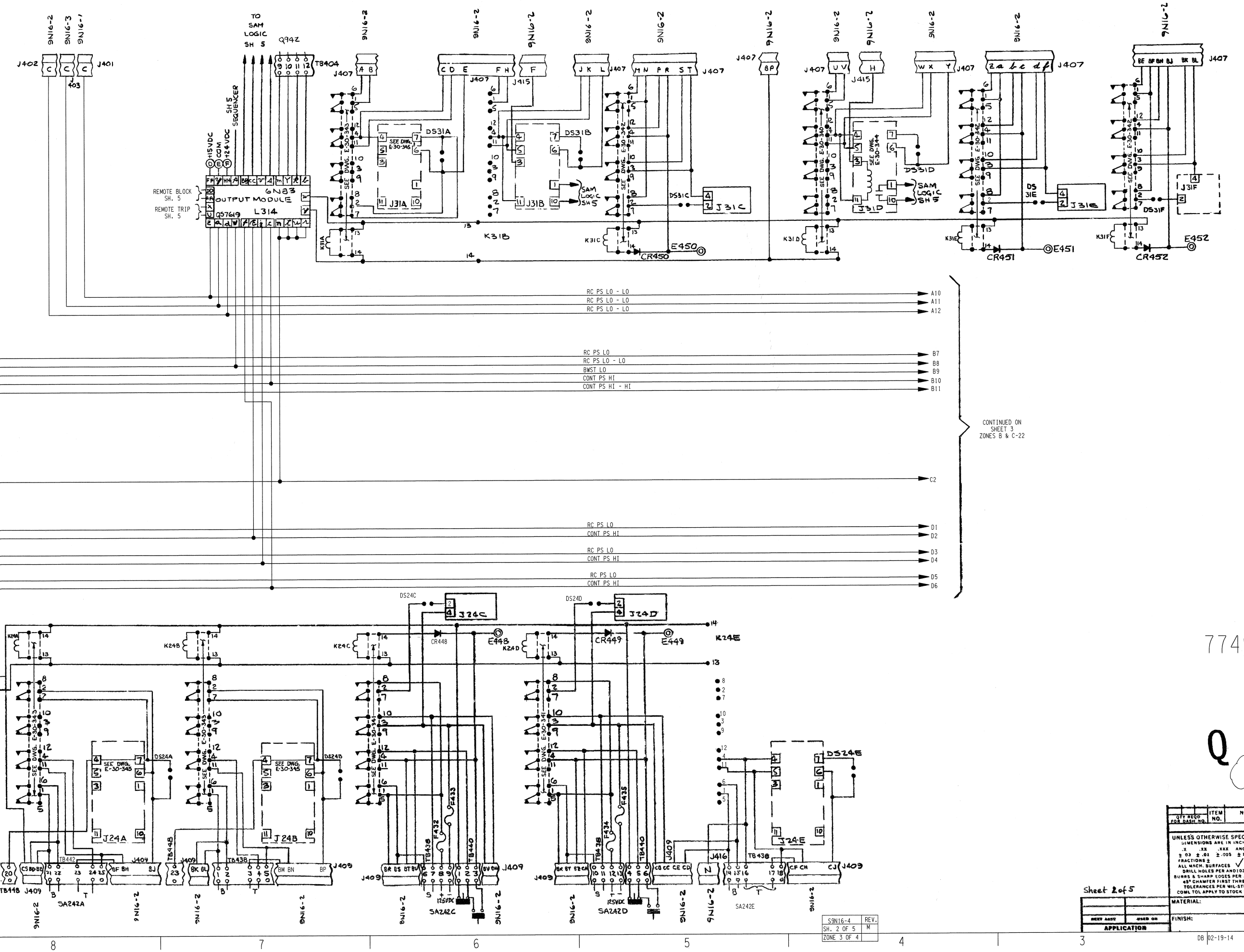
26
25
24
23
22
125VDC
+ -
17 18 TB447
TO ALL TB'S REQUIRING ±125VDC
TO TBI ON DATA LIGHT PANEL. SEE VDWG. E-30-339.
TO SAM LOGIC SH 5
Q934
1 2 3 4 TB404
+15VDC
COM
+24VDC
SEQUENCER, SH.5
A B C
REMOTE BLOCK SH 5
REMOTE TRIP SH 5
OUTPUT MODULE
6N83
L114
Q57575
9N16-2
A B C D E F J406
J406 BZ H J
D J415
K L H J406
J415 C
N P J406
R S T J406
J415 B
J406 U V
W X Y J406
J415 A
J406 Z a
b c d J406
SEE DWG. E-30-342
SEE DWG. E-30-340
SEE DWG. E-30-344
J11E
J11D
J11C
J11B
J11A
DS11E
DS11D
DS11C
DS11B
DS11A
SAM LOGIC SH 5
K11E
K11D
K11C
K11B
K11A
CR440
E440
A1
A2
A3
A4
A5
A6
A7
A8
A9
CONT PS HI
RC PS LO
CONT RAD
CONT PS HI
RC PS LO
CONT RAD
CONT PS HI
RC PS LO
CONT RAD
CONT RAD
CONTINUED FROM SH 1 ZONE C-3
B1
B2
B3
B4
B5
B6
RC PS LO
RC PS LO - LO
BWST LO
CONT PS HI
CONT PS HI - HI
C1
TO SAM LOGIC SH 5
Q926
5 6 7 8
SH 5 SEQUENCER
+15VDC
COM
+24VDC
REMOTE BLOCK SH5
REMOTE TRIP SH5
OUTPUT MODULE
6N83
L124
Q57579
REMOTE BLOCK SH. 5
REMOTE TRIP SH. 5
OUTPUT MODULE
6N83
L214
Q57583
+15VDC
COM
+24VDC
T3
SH 5, SEQUENCER
K21A
K21B
K21C
SEE DWG. E-30-343
SEE DWG. E-30-340
SEE DWG. E-30-345
J21A
J21B
J21C
DS21A
DS21B
DS21C
14
CR441
E441
K21D
13
DS21D
J21D
F455
F454
J402
AF AH AJ
9 10 11 12
TB414
Q938
TB448
22
TB 439
1 2 3 4 5
A B C D E
J409
B T
SA212A
J416
A
6 7 8 9 10
TB439
F H J K L
J409
SA212B
J416
B
11 12 13 14 15
TB439
M N P R S
J409
SA212C
J409
T U V W X λ
TB439
16 17 18 19
S + -
125VDC
SA212D
TB436
1 2 3
[redacted]
T3
REMOTE SH.
REMOTE SH.


21
20
19
18
17
16
15
9N16-2
TB404
J415
J406
E
K12A
K12B
K12C
K12D
K12E
K12F
J12A
J12B
J12C
J12D
J12E
J12F
DS12A
DS12B
DS12C
DS12D
DS12E
DS12F
SAM LOGIC SH 5
SAM LOGIC SH.5
SEE DWG. E-30-340
SEE DWG. E-30-342
CR443
CR444
CR445
CR446
E443
E444
E445
E446
RC PS LO
RC PS LO - LO
BWST LO
CONT PS HI
CONT PS HI - HI
RC PS LO
CONT PS HI
BLOCK 5
TRIP 5
6N83
OUTPUT MODULE
L224
OS7587
+15V
COM
+24V
SEQUENCER SH 5
J402
Q906
TB415
J416
J409
TB 439
SA222A
SA222B
SA222C
SA222D
K22A
K22B
K22C
K22D
DS22A
DS22B
DS22C
DS22D
J22A
J22B
J22C
J22D
CR442
E442
F457
F456
TB436
125VDC
REMOTE BLOCK SH. 5
REMOTE TRIP SH. 5
6N83
OUTPUT MODULE
L234
Q57591
+15VDC
COM
+24VDC
SH 5, SEQUENCER
Q854
TB448
TB 442
K23A
K23B
SEE DWG. E-30-343
SEE DWG. E-30-345
DS23A
J23A
J23B
SA232A
SA232B
T3

S9N16-4 | REV M
SH 2 OF 5
ZONE 1 OF 4


9N16-2
J406
AU AV AX AY AW
BA BB BD BE BC
BH BJ BL BN BK
BP BR BT BU BS
CS CR CN CM CP
CK CJ CF CH CE CD
J408
SEE DWG. E-30-340
J12G
J12H
J12I
J12J
J12K
J12L
DS12G
DS12H
DS12I
DS12J
DS12K
DS12L
SAM LOGIC SH.5
K12G
K12H
K12I
K12J
K12K
K12L
CR447
E447
K23C
K23D
K23E
K23F
K23G
K23H
J23C
J23D
J23E
J23F
J23G
J23H
DS23B
DS23C
DS23D
DS23E
DS23F
DS23G
DS23H
J416
J409
J410
TB 442
TB439
TB443
TB 443
SA232C
SA232 D
SA232E
SA232F
SA232G
SA232H
B T
F
H
J
K
L
M
REMOTE BLOCK SH. 5
REMOTE TRIP SH. 5
6N83
OUTPUT MODULE
L244
QS7595
+15VDC
COM
+24VDC
SH 5, SEQUENCER
J402
TB415
Q954
T3

S9N16-4	REV
SH 2 OF 4	M
ZONE 2 OF 4	


9N16-2
9N16-3
9N16-1
J402
J401
J403
TO SAM LOGIC SH 5
Q942
TB404
9 10 11 12
SH 5 SEQUENCER
+15VDC
COM
+24VDC
REMOTE BLOCK SH. 5
REMOTE TRIP SH. 5
OUTPUT MODULE
6N83
L314
Q57619
J407
J415
SEE DWG. E-30-345
SEE DWG. E-30-342
SEE DWG. E-30-340
SEE DWG. E-30-344
DS31A
DS31B
DS31C
DS31D
DS31E
DS31F
J31A
J31B
J31C
J31D
J31E
J31F
SAM LOGIC SH 5
K31A
K31B
K31C
K31D
K31E
K31F
CR450
E450
CR451
E451
CR452
E452
13
14
RC PS LO - LO
A10
A11
A12
RC PS LO
RC PS LO - LO
BWST LO
CONT PS HI
CONT PS HI - HI
B7
B8
B9
B10
B11
CONTINUED ON SHEET 3 ZONES B & C-22
C2
RC PS LO
CONT PS HI
D1
D2
D3
D4
D5
D6
DS24C
DS24D
J24C
J24D
CR448
E448
CR449
E449
K24A
K24B
K24C
K24D
K24E
SEE DWG. E-30-343
SEE DWG. E-30-341
DS24A
DS24B
DS24E
J24A
J24B
J24E
F432
F433
F434
F435
TB442
TB438
TB440
TB448
J409
J416
125VDC
SA242A
SA242C
SA242D
SA242E
9N16-2

7749-E-30-28-~~14~~-15

Q

T3

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
D	G	SHT. 2 ADDED DIODES CR440-CR452 TERM. PTS E440 - E452 SHT 3 ADDED DIODES. CR453-CR469. & TERM. PTS E453 - E469 SHT. 4 ADDED DIODES CR470-CR482 & TERM PTS. E470 - E482	9/[illegible]	KBC
8B		CH'D COM B TO E AT BA406 & B TO E AT BA407, B TO E AT BA405		
9C		CH'D B TO E AT BA404 & BA405		
12D 8&A		CH'D E TO H AT AA201, E TO H AT AA403 & E TO H AT 404		
	M	SEE SHT. 3		

INPUT/OUTPUT SIGNAL DESCRIPTION (TYPICAL)

SIGNAL	SYMBOL	DESCRIPTION	FROM-TO
N/A	SA421A	UNIQUE SAFETY ACTUATION SIGNAL NO SEQUENTIAL LETTER ACTUATION CHANNEL SYSTEM NUMBER INCIDENT SAFETY ACTUATION SIGNAL	SEE DWG 7749 E17B FOR CROSS REFERENCE TO THE EQUIPMENT ITEM NUMBER
OUTPUT	SA(Y)421A	START (STOP) SIGNAL TO MOTOR CONTROLLER	MCC
OUTPUT	SA(B)421A	INTERLOCK SIGNAL TO MOTOR CONTROLLER	MCC
OUTPUT	SAM421A	SAFETY ACTUATION MONITORING LIGHT	PANEL C5716&17
INPUT	BLK421	BLOCK SWITCH	PANEL C5716 &17
OUTPUT	SA(S)282K	125 V DC SIGNAL TO SOLENOID VALVE	SOLENOID VALVE
INPUT	SA 282K	CONTROL SWITCH FOR SOLENOID VALVE	PANEL C5716&17
INPUT	SAC 282K	SAM LOGIC POSITION SWITCH	VALVE POSITION

Ⓐ	+15VDC
Ⓑ	COMMON
Ⓒ	+24VDC
Ⓓ	+15VDC
Ⓔ	COMMON
Ⓕ	+24VDC
Ⓖ	+15VDC
Ⓗ	COMMON
Ⓘ	+24VDC
Ⓙ	-15VDC
Ⓚ	+15VDC } AUTO TEST
Ⓛ	COMMON } AUTO TEST

THIS DRAWING WAS REDRAWN/SCANNED ON CAD AND SUPERSEDES SUBMITTAL 14

NO.	DATE	REVISIONS	BY	CH'K	ENGR	ENGR SUPV	GEN SUPV
T3	3/4/14	INC. DUN 13-0476-001-001 REV.00 & GEN. UPDATE REMOVE THE FOLLOWING REFERENCES "E-30-28-14 (3 PLC'S.) & PART 1,2,3 & 4" REFERENCES REMOVED FOR CLARITY AS THEY ARE NO LONGER NEEDED. (REDRAWN)	SAC	SBW	—	RJC	—
T2	2/21/92	INC. DCN'S. E-30-28-3 THRU 7 FOR MOD. 90-0006 SUPP. 00	JFS	JJS	TAG	CER	ORB
T1	9/21/89	AS BUILT FOR MOD 88-195, SUP. O. INC. VDCN E-30-28-2	GFB		CER	MLB	ORB

QTY REQD FOR DASH NO.	ITEM NO.	NOMENCLATURE OR DESCRIPTION	DWG SIZE	PART OR IDENTIFYING NO.	SPECIFICATION	MATERIAL OR NOTE	REMARKS

LIST OF MATERIAL

Sheet 2 of 5

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.X .XX .XXX ANGLES
± .03 ± .01 ± .005 ± 1/2°
FRACTIONS ±
ALL MACH. SURFACES ✓ RMS
DRILL HOLES PER AND10387
BURRS & SHARP EDGES PER JZL315
45° CHAMFER FIRST THREAD
TOLERANCES PER MIL-STD-8
COML TOL APPLY TO STOCK SIZES

DRAWN J. Sorda 10 Feb 72
CHECKED
ENGR
RELEASED

CONSOLIDATED CONTROLS CORPORATION
BETHEL CONN.
EL SEGUNDO, CALIF.

SCHEMATIC DIAGRAM
DAVIS BESSE
SAFTEY FEATURES ACTUATION SYSTEM

NEXT ASSY	USED ON
APPLICATION	

MATERIAL:
FINISH:

7749-E-30-28

SIZE	CODE IDENT NO.	
H	02750	S9N16-4

SCALE ~ WT. CALC ACT. SHEET 2 OF 4 REV. M

S9N16-4 SH. 2

S9N16-4	REV.
SH. 2 OF 5	M
ZONE 3 OF 4	

DB 02-19-14

DFN=J/RASDGN/E3028.DGN/TIF

D C B A