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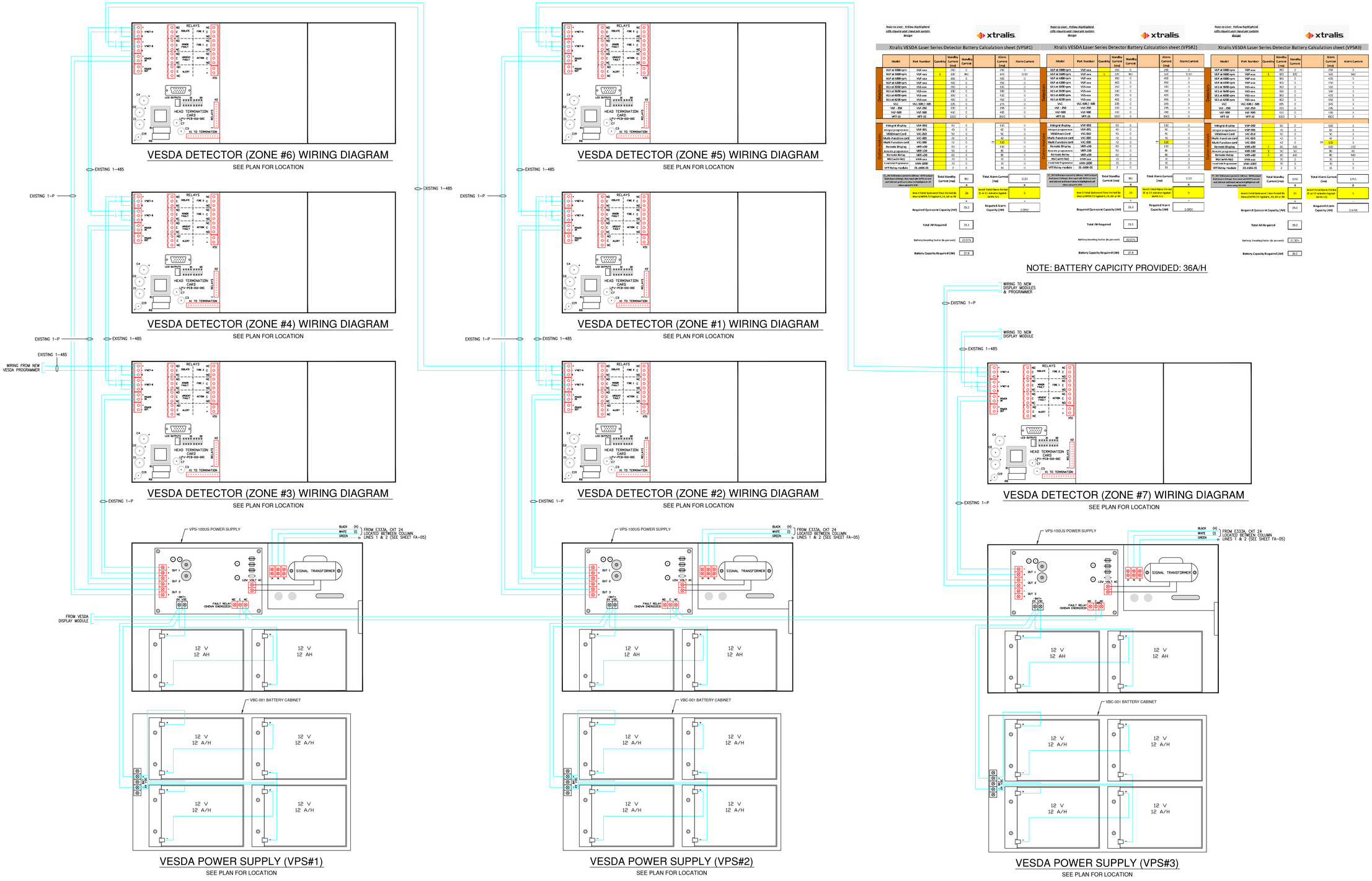

Note to User: Yellow highlighted cells require user input and system design

xtralis

Xtralis VESDA Laser Series Detector Battery Calculation sheet (VPS#1)

	Model	Part Number	Quantity	Standby Current (mA)	Standby Current		Alarm Current (mA)	Alarm Current
VESDAnet	VLP at 3300 ppm	VLP-xxx		290	0		290	0
	VLP at 3500 ppm	VLP-xxx	3	320	960		340	1,020
	VLP at 4300 ppm	VLP-xxx		390	0		430	0
	VLP at 4200 ppm	VLP-xxx		400	0		450	0
	VLS at 3300 ppm	VLS-xxx		290	0		330	0
	VLS at 3500 ppm	VLS-xxx		330	0		390	0
	VLS at 4300 ppm	VLS-xxx		390	0		430	0
	VLS at 4200 ppm	VLS-xxx		400	0		450	0
	VLC	VLC-500 / -505		225	0		245	0
	VLF - 250	VLF-250		230	0		275	0
	VLF-500	VLF-500		430	0		490	0
	VFT-15	VFT-15		1300	0		1300	0
Integral Display	Integral Display	VSP-002		60	0		130	0
	Integral programmer	VSP-001		40	0		90	0
	VESDAnet Card	VIC-002		50	0		90	0
	Multi-Function card	VIC-020		42	0		42	0
	Multi-Function card	VIC-030		42	0	**	0.35	0
	Remote Display	VEP-x00		60	0		130	0
	Remote programmer	VEP-100		50	0		80	0
	Remote Relay	VEP-x00		60	0		80	0
	Mini switch Mk2	VMS-xxx		20	0		40	0
	Hand held Programmer	VMS-1000		70	0		90	0
	VFT Relay module	ZE-1606-03		2	0		33	0

Total Standby Current (ma): 960
Total Alarm Current (ma): 1,120

Insert Total Alarm Period (5 or 15 minutes typical) 5

Insert Total Quiescent Time Period (8 Hours to NFPA 72 typical) 24

Required Quiescent Capacity (AH): 29.2

Required Alarm Capacity (AH): 0.0892

Total AH Required: 29.1

Battery Derating Factor (in percent): 49.07%

Battery Capacity Required (AH): 27.8

Xtralis VESDA Laser Series Detector Battery Calculation sheet (VPS#2)

	Model	Part Number	Quantity	Standby Current (mA)	Standby Current		Alarm Current (mA)	Alarm Current
VESDAnet	VLP at 3300 ppm	VLP-xxx		290	0		290	0
	VLP at 3500 ppm	VLP-xxx	3	320	960		340	1,020
	VLP at 4300 ppm	VLP-xxx		390	0		430	0
	VLP at 4200 ppm	VLP-xxx		400	0		450	0
	VLS at 3300 ppm	VLS-xxx		290	0		330	0
	VLS at 3500 ppm	VLS-xxx		330	0		390	0
	VLS at 4300 ppm	VLS-xxx		390	0		430	0
	VLS at 4200 ppm	VLS-xxx		400	0		450	0
	VLC	VLC-500 / -505		225	0		245	0
	VLF - 250	VLF-250		230	0		275	0
	VLF-500	VLF-500		430	0		490	0
	VFT-15	VFT-15		1300	0		1300	0
Integral Display	Integral Display	VSP-002		60	0		130	0
	Integral programmer	VSP-001		40	0		90	0
	VESDAnet Card	VIC-002		50	0		90	0
	Multi-Function card	VIC-020		42	0		42	0
	Multi-Function card	VIC-030		42	0	**	0.35	0
	Remote Display	VEP-x00		60	0		130	0
	Remote programmer	VEP-100		50	0		80	0
	Remote Relay	VEP-x00		60	0		80	0
	Mini switch Mk2	VMS-xxx		20	0		40	0
	Hand held Programmer	VMS-1000		70	0		90	0
	VFT Relay module	ZE-1606-03		2	0		33	0

Total Standby Current (ma): 960
Total Alarm Current (ma): 1,120

Insert Total Alarm Period (5 or 15 minutes typical) 5

Insert Total Quiescent Time Period (8 Hours to NFPA 72 typical) 24

Required Quiescent Capacity (AH): 29.2

Required Alarm Capacity (AH): 0.0892

Total AH Required: 29.1

Battery Derating Factor (in percent): 49.07%

Battery Capacity Required (AH): 27.8

Xtralis VESDA Laser Series Detector Battery Calculation sheet (VPS#3)

	Model	Part Number	Quantity	Standby Current (mA)	Standby Current		Alarm Current (mA)	Alarm Current
VESDAnet	VLP at 3300 ppm	VLP-xxx		290	0		290	0
	VLP at 3500 ppm	VLP-xxx	3	320	920		340	360
	VLP at 4300 ppm	VLP-xxx		390	0		430	0
	VLP at 4200 ppm	VLP-xxx		400	0		450	0
	VLS at 3300 ppm	VLS-xxx		290	0		330	0
	VLS at 3500 ppm	VLS-xxx		330	0		390	0
	VLS at 4300 ppm	VLS-xxx		390	0		430	0
	VLS at 4200 ppm	VLS-xxx		400	0		450	0
	VLC	VLC-500 / -505		225	0		245	0
	VLF - 250	VLF-250		230	0		275	0
	VLF-500	VLF-500		430	0		490	0
	VFT-15	VFT-15		1300	0		1300	0
Integral Display	Integral Display	VSP-002		60	0		130	0
	Integral programmer	VSP-001		40	0		90	0
	VESDAnet Card	VIC-002		50	0		90	0
	Multi-Function card	VIC-020		42	0		42	0
	Multi-Function card	VIC-030		42	0	**	0.35	0
	Remote Display	VEP-x00	2	60	120		130	272
	Remote programmer	VEP-100	1	50	50		80	80
	Remote Relay	VEP-x00	2	60	120		80	160
	Mini switch Mk2	VMS-xxx		20	0		40	0
	Hand held Programmer	VMS-1000		70	0		90	0
	VFT Relay module	ZE-1606-03		2	0		33	0

Total Standby Current (ma): 1,592
Total Alarm Current (ma): 1,763

Insert Total Alarm Period (5 or 15 minutes typical) 5

Insert Total Quiescent Time Period (8 Hours to NFPA 72 typical) 24

Required Quiescent Capacity (AH): 29.2

Required Alarm Capacity (AH): 0.1468

Total AH Required: 29.2

Battery Derating Factor (in percent): 47.36%

Battery Capacity Required (AH): 30.0

NOTE: BATTERY CAPICITY PROVIDED: 36A/H

REVISIONS

No.	Revision	By	Date	Appr.
1	REVISED PER LBNL FM REVIEW COMMENTS 6-4-12	JPM	6/5/12	KW
	AS-BUILT	JPM	9/19/12	KW

AS-BUILT

← TO APPROVAL STAMP

INSTALLATION CONTRACTORS NAME & ADDRESS:

M & M ELECTRIC
1009 Gettysburg Way,
Modesto, CA 95355
Tel (209) 204-2798

PRODUCT MANUFACTURER:

Siemens Industry, Inc.
Fire Safety Division
25821 Industrial Boulevard, Suite 300
Hayward, California 94545-2991
Tel (510) 783-6000 Fax (510) 293-2100
California State C10 License No. 758796
U.L. Certificate ID No. 324787-001

JOB NAME & LOCATION (STREET ADDRESS):

UNIVERSITY OF CALIFORNIA
LAWRENCE BERKELEY NATIONAL LABORATORY
FACILITIES DIVISION

BUILDING 6
VESDA

One Cyclotron Road,
Berkeley, California 94720

SHEET CONTENTS:

VESDA "LaserPLUS"
DETECTOR & POWER SUPPLY

INSTALLATION TYPE:

- ☐ NEW INSTALLATION
- ☐ DESIGN/BUILD
- ☐ PER CONTRACT DOCUMENT
- ☐ EXISTING BASE JOB # N/A
- ☐ OTHERS

SYSTEM SALES REP:	Kevin Waxman
PROJECT MANAGER:	Karen Davis
DRAWN BY:	JPM
CAD FILENAME:	FA-04
SCALE:	Not Applicable
DATE DRAWN: May 29, 2010	PLOT DATE: March 19, 2014

DRAWING NO.	SHEET	CAD NUMBER
5B06E349	FA-04	44OP-109114

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