PANEL: P
LOCATION: ELECT. 104
MOUNTING: SURFACE
PANEL VOLTAGE: 120/208 3P, 4W
BUS: 400A
MAIN: 350A/3P
A/C RATING: 42,000 SERIES RATED
CIRCUIT CODE: N: NON-CONTINUOUS; L: LONG-CONTINUOUS; R: DEMANDABLE RECEPTACLES; K: KITCHEN

CKT NO	VA LOAD A	VA LOAD B	VA LOAD C	LOAD DESCRIPTION	SW	TYPE CNT.	C.B.	BUS	C.B.	TYPE CNT.	SW	LOAD DESCRIPTION	VA LOAD A	VA LOAD B	VA LOAD C	CKT NO
1	690			WAU-1	N	1 - -	15 3	X	20 1	1	N	P.A. RACK	1000			2
3		690		-	N	- - -	- -	X	20 1	2 L	N	EF-3 & 4		235		4
5			690	-	N	- - -	- -	X	20 1	1 L	N	FAU-1			1332	6
7	720			EF-1	N	1 1	20 2	X	20 1		N	P.I.V. AND TAMPER SWITCH	100			8
9		720			N		- -		30 1		N	MICROWAVE SWITCH		1200		10
11				SPACE				X	20 1	1	N	EQ-2			1050	12
13				SPACE					20			SPARE				14
15		720		OUTDOOR RECEPTACLES	R	4	20 1	X	20 1			SPARE				16
17			720	OUTDOOR RECEPTACLES	R	4	20 1	X	20 1			SPARE				18
19	180			OUTDOOR RECEPTACLES	R	1	20 1	X	20 1			SPARE				20
21		540		ROOF RECEPTACLE	R	3	20 1	X	20 1			SPARE				22
23			200	DUCT DETECTORS	N	8	20 1	X	20 1	1	N	WATER HEATER CONTROLS			180	24
25	1020			EF-2 & 5	N	2	20 1	X	20 1		N	REFRIGERATOR	1040			26
27		5000		DISHWASHER	N		60 2	X	20 1		N	ICE MACHINE		1920		28
29			5000	---	N		- -	X	20 1		N	MICROWAVE			1500	30
31	3150			COFFEE MAKER	N	1	30 3	X	15 2		L	DISPOSER	828			32
33		3150		---	N		- - -	X	- -		L	---		828		34
35			3150	---	N		- - -	X	20 1	1	N	IRRIGATION CONTROLLER			100	36
37	6787			PANEL "L"	L	1 1	150 3	X	150 3	1	N	PANEL "P1"	11880			38
39		5712		---	L		- - -		- -		N	---		13340		40
41			6907	---	L		- - -	X	- -		N	---			11969	42
	12597	16902	16867	PHASE TOTALS								PHASE TOTALS	14848	17523	18131	

Total Phase A: 27445
Total Phase B: 34125
Total Phase C: 32798

CONNECTED VA (CODE N):	69599
CONNECTED VA (CODE L):	22609
CONNECTED VA (CODE R):	2160
CONNECTED VA (CODE K):	
TOTAL CONNECTED KVA:	94.4
DEMAND KVA:	
TOTAL ADJUSTED KVA:	94.4
TOTAL PANEL AMPS:	264.4
AMPS W/(CL):	301.6

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PANEL: P1
LOCATION: ELECT. 104
MOUNTING: SURFACE
PANEL VOLTAGE: 120/208 3P, 4W
BUS: 200A
MAIN: L.O.
A/C RATING: 42,000 SERIES RATED
CIRCUIT CODE: N: NON-CONTINUOUS; L: LONG-CONTINUOUS; R: DEMANDABLE RECEPTACLES; K: KITCHEN

CKT NO	VA LOAD A	VA LOAD B	VA LOAD C	LOAD DESCRIPTION	SW	TYPE CNT.	C.B.	BUS	C.B.	TYPE CNT.	SW	LOAD DESCRIPTION	VA LOAD A	VA LOAD B	VA LOAD C	CKT NO
1	1080			OFFICES	N	1 6	20 1	X	20 1	4	N	OFFICES	720			2
3		1080		OFFICES	N	1 6	20 1		20 1	4	N	OFFICES		720		4
5			900	OFFICES	N	1 5	20 1		20 1	2	N	EXIT'S			1334	6
7	920			RECTROOMS	N	1 4	20 1	X	20 1	3	N	KITCHEN	540			8
9		2000		HAND DRYER	N	1 1	20 1	X	20 1	2	N	FLY FAN, HOOD		900		10
11			2000	HAND DRYER	N	1 1	20 1	X	20 1	2	N	KITCHEN			360	12
13	720			MULTI PURPOSE	N	1 4	20 1	X	20 1	7	N	LOBBY	1260			14
15		540		MULTI PURPOSE	N	1 3	20 1	X	20 1	1	N	VENDING		1000		16
17			540	MULTI PURPOSE	N	1 3	20 1	X	20 1	1	N	VENDING			1000	18
19	1080			EXHIBIT	N	1 6	20 1	X	20 1	6	N	GFTS, CONTROL	1080			20
21		1080		EXHIBIT	N	1 6	20 1	X	20 1	6	N	GFTS, CONTROL		1080		22
23			1080	EXHIBIT	N	1 6	20 1	X	20 1	6	N	GFTS, CONTROL			1080	24
25	1000			T.L. RECEPTACLES	R	1 2	20 1	X	20 1	3	N	GFTS, CONTROL	540			26
27		1000		T.L. RECEPTACLES	R	1 2	20 1	X	20 1	1	N	CONTROL RECEPT.		180		28
29	375			FC-1	N	1 1	20 1	X	20 1	1	N	CONTROL RECEPT.			180	30
31				SPARE			20 1	X	20 1	1	N	FIBER OPTIC MAPWALL	180			32
33				SPARE			20 1	X	20 1	1	N	VIDEO WALL		180		34
35				SPARE			20 1	X	20 1	1	N	MULTI-PURPOSE RECEPT.			180	36
37	2500			EQ-1	N	1 1	40 3	X	20 1	1	N	MULTI-PURPOSE RECEPT.	180			38
39		2580		----------	N	--	-- --		20 1	1	N	COFFEE MAKER		1000		40
41			2580	----------	N	--	-- --	X	20 1	1	N	FACP			360	42
	7380	8280	7420	PHASE TOTALS								PHASE TOTALS	4500	5060	4920	

Total Phase A: 11880
Total Phase B: 13340
Total Phase C: 11969

CONNECTED VA (CODE N):	35189
CONNECTED VA (CODE L):	
CONNECTED VA (CODE R):	2000
CONNECTED VA (CODE K):	
TOTAL CONNECTED KVA:	37.2
DEMAND KVA:	
TOTAL ADJUSTED KVA:	37.2
TOTAL PANEL AMPS:	111.2
AMPS W/(CL):	111.2

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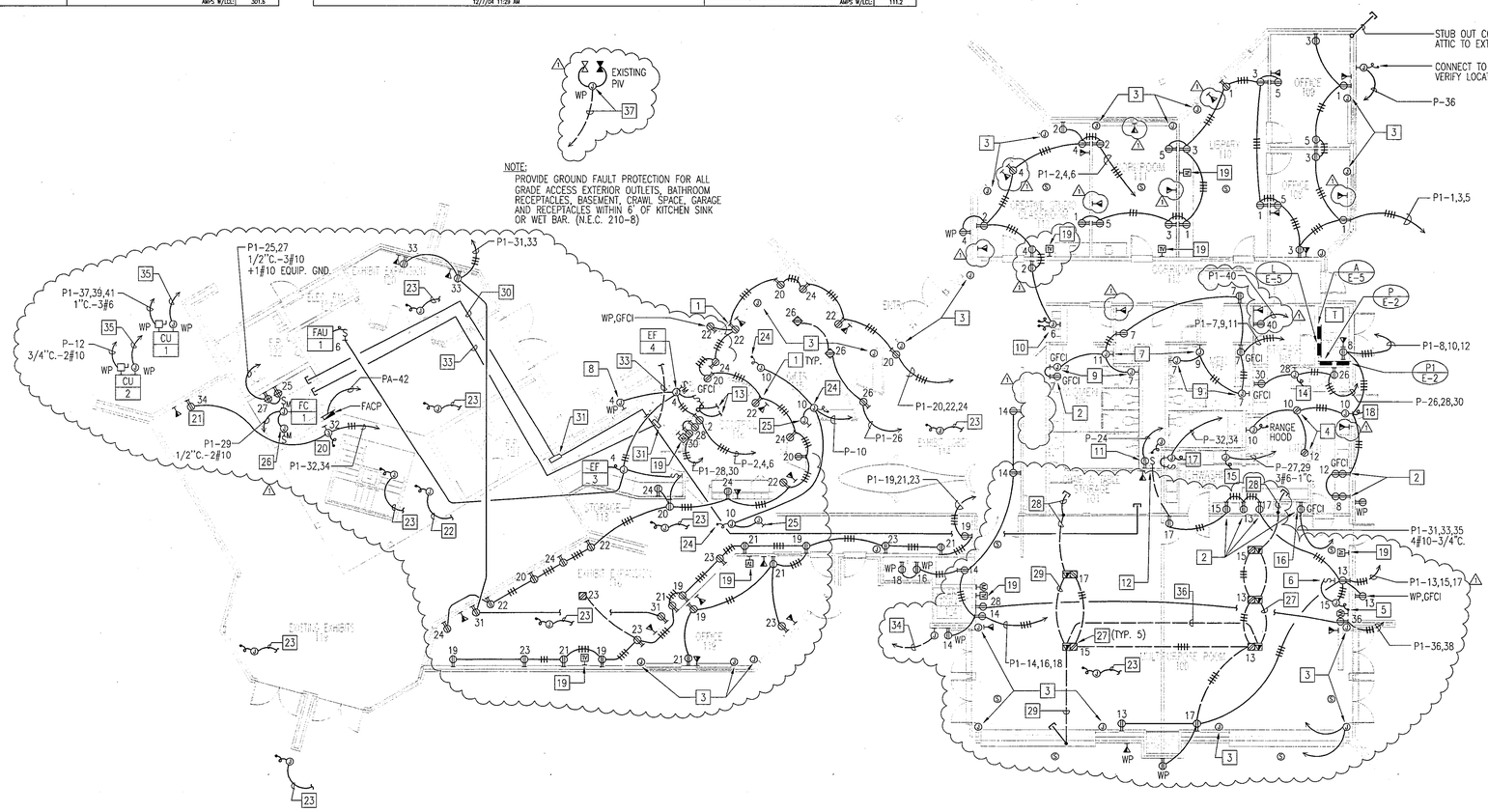

PLAN NOTES:

1. MOUNT IN CASEWORK AS DIRECTED BY ARCHITECT.
2. MOUNT HORIZONTAL +6" ABOVE COUNTER SPLASH.
3. CONNECT AS REQUIRED TO EXTERIOR SECURITY SHUTTER. VERIFY REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.
4. SUSPEND FROM CEILING AT +72" WITH FLEXIBLE CABLE AND KELLEMS GRIPS.
5. CONNECT AS REQUIRED TO MOTORIZED PROJECTION SCREEN.
6. ENGRAVE, "PROJECTION SCREEN".
7. CONNECT AS REQUIRED TO ELECTRIC HAND DRYER.
8. CONNECT AS REQUIRED TO FIRE SPRINKLER BELL. VERIFY EXACT LOCATION.
9. CONNECT AS REQUIRED TO 50VA LOW VOLTAGE TRANSFORMER FOR SINKS/TOILETS.
10. CONNECT AS REQUIRED TO ELECTRIC DRINKING FOUNTAIN.
11. RECEPTACLE FOR WATER HEATER CONTROLS.
12. CONNECT AS REQUIRED TO 1/12 H.P. 120V CIRCULATION PUMP. WIRE THRU 7-DAY TIMELOCK, SEE DETAIL "4" SHEET P-4.
13. PROVIDE (2) 1"C.O. TO ACCESSIBLE CEILING SPACE FOR AUDIO/VIDEO EQUIPMENT.
14. CONNECT AS REQUIRED TO 16 AMP 120 VOLT ICE MAKER.
15. CONNECT AS REQUIRED TO 10KW, 208 VOLT, 1PH DISHWASHER.
16. 30A, 250 VOLT, 3ø, 4 WIRE GROUNDING RECEPTACLE FOR COFFEE MAKER.
17. CONNECT AS REQUIRED TO 208 VOLT, 1ø FOODWASTE DISPOSER.
18. CONNECT AS REQUIRED TO 5-1AMP, 120 VOLT FLY FAN AND ASSOCIATED CONTROLS.
19. VERIFY EXACT LOCATION PRIOR TO INSTALLATION.
20. CONNECT TO FIBER OPTIC MAPWALL. VERIFY LOCATION AND REQUIREMENTS.
21. CONNECT TO VIDEO WALL PROJECTION SYSTEM. VERIFY LOCATION AND REQUIREMENTS.
22. PROVIDE 1"C.O. TO CONTROL ROOM FOR ELECTRONIC VISUAL CONTROL VIDEO CAMERA. VERIFY LOCATION AND REQUIREMENTS.
23. PROVIDE 1"C.O. TO CONTROL ROOM FOR INTERCOM SYSTEM. VERIFY LOCATION AND REQUIREMENTS.
24. CONNECT TO MOTORIZED SHUTTER AS REQUIRED.
25. WALL MOUNTED CARD READER. VERIFY LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
26. CONNECT TO CONDENSER PUMP, COORDINATE ALL REQUIREMENTS AND LOCATION WITH MECHANICAL.
27. PROVIDE TWO GANG CAST IRON DUAL LEVEL FLOOR BOX WITH DEVICES INDICATED WITH COVER PLATE AND FLOOR FLANGE.(HUBBELL #B4233-SERIES OR EQUAL).
28. PROVIDE 1 1/4" CONDUIT FOR TELE/DATA CABLE TO ACCESSIBLE CEILING AREA.
29. PROVIDE 1" CONDUIT FOR TELE/DATA CABLES.
30. PROVIDE THREE (3)3" CONDUITS FOR DATA CABLES AS INDICATED, COORDINATE EXACT ROUTING IN ACCESSIBLE CEILING AREA WITH BUILDING CONDITION.
31. PROVIDE 2'x2'x6" PULLBOX, COORDINATE EXACT LOCATION WITH OWNER / ARCHITECT PRIOR TO INSTALLATION.
32. PROVIDE TWO (2)3" CONDUITS TO IT ROOM, COORDINATE EXACT ROUTING IN ACCESSIBLE CEILING AREA WITH BUILDING CONDITIONS.
33. TWO (2)3" CONDUITS, FOR CONTINUATION SEE SHEET "E-1".
34. PROVIDE 1 1/2" C.O. TO IT ROOM.
35. 1/2"C.O. FOR CONTROL TO FAN UNIT, COORDINATE WITH MECHANICAL.
36. PROVIDE 1 1/4"C.O. FOR TELEPHONE/DATA CABLES.
37. PROVIDE 1"C. WITH FA CABLES FROM EXISTING P.I.V. LOCATION TO NEW FACP. COORDINATE ALL REQUIREMENTS AND EXACT LOCATIONS WITH EXISTING CONDITIONS PRIOR TO INSTALLATION.

NOTE:
COORDINATE SECURITY SYSTEM REQUIREMENTS WITH:
GENERAL SECURITY SYSTEMS
1127 LOMA AVE.
LONG BEACH, CA 90804
(562) 434-4441

△ 1 IT COORDINATION 11-23-04
△ VISION
PERMIT #
APPROVED
DEC 1 0 2004

north
0' 2' 4' 8' 16'

RON YEO, FAIA ARCHITECT, INC.
500 JASMINE AVENUE, CORONA DEL MAR
CALIFORNIA 92625 P:714-644-8711 F:714-644-0449
PATRICK MARR, AIA, PE, ASSOCIATE ARCHITECT

REGISTERED ARCHITECT STATE OF CALIFORNIA RON YEO C3567 RENEWAL 8/31/06

REGISTERED PROFESSIONAL ENGINEER PATRICK MARR M 24 ELECTRICAL EXP. 6-30-06 STATE OF CALIFORNIA

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1751 East Corry Avenue
Santa Ana, CA 92705-5814
Telephone (949) 428-8800
Fax (949) 428-8805

POINT VICENTE INTERPRETIVE CENTER EXPANSION
31501 Palos Verdes Drive West
Rancho Palos Verdes, CA

ISSUE DATE: 1-5-04

POWER AND SIGNAL PLAN

DRAWN: TL
CHECKED: DK
DATE: 2-1-99
SCALE: 1/8" = 1'-0"
JOB NO.: 97358
SHEET: E-2
65 OF 69 SHEETS

PUC EXPANSION Building Plans Construction Set Dec. 2003

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