

REFRIGERANT PIPE SIZE SCHEDULE			
SPLIT SYSTEMS MARK NUMBERS	TONNAGE	REFRIGERANT PIPE SIZE	
		SUCTION	LIQUID
FC-1 / HP-1	2	5/8"	3/8"
FC-2 / HP-2	3.5	7/8"	3/8"
FC-3 / HP-3	4	7/8"	3/8"

FAN COIL KEY NOTE SCHEDULE

① PROVIDE FAN COIL WITH THE FOLLOWING OPTIONS:
A) PROVIDE KFCEH0501N05 5 KW STRIP
B) HEAT STRIP HEATER POWER IS IN ADDITION TO FAN HEAT PUMP.

② PROVIDE FAN COIL WITH THE FOLLOWING OPTIONS:
A) PROVIDE KFCEH0801N08 8 KW STRIP
B) HEAT STRIP HEATER POWER IS IN ADDITION TO FAN HEAT PUMP.

③ PROVIDE FAN COIL WITH THE FOLLOWING OPTIONS:
A) PROVIDE KFCEH0901N10 10 KW STRIP
B) HEAT STRIP HEATER POWER IS IN ADDITION TO FAN HEAT PUMP.

MARK	MAKE & MODEL	DESCRIPTION	CAPACITY				ELECT. CHARACTERISTICS				REMARKS					
			CFM	MIN OA	SP	HEATING MBH IN	MBH OUT	ROW	COOLING MBH SEN	MBH TOTAL	SEER	ITEM	LOAD	VOLTS	Ø	
HP-1	CARRIER 25HPA424A003	AIR COOLED HEAT PUMP	--	--	--	--	--	--	17.00	22.01	14.5	FLA MCA	13.5 16.73	208/230	1	OPER.WT.= 230#
HP-2	CARRIER 25HPA442A003	AIR COOLED HEAT PUMP	--	--	--	--	--	--	30.24	39.49	14.0	FLA MCA	21.0 25.94	208/230	1	OPER.WT.= 280#
HP-3	CARRIER 25HPA448A003	AIR COOLED HEAT PUMP	--	--	--	--	--	--	34.77	44.63	14.0	FLA MCA	23.10 28.64	208/230	1	OPER.WT.= 310#

FAN COIL UNIT SCHEDULE

MARK	MAKE & MODEL	DESCRIPTION	CAPACITY				ELECT. CHARACTERISTICS				REMARKS		
			CFM	MIN OA	ESP	HEATING MBH AFUE	COOLING MBH	EER	ITEM	LOAD	VOLTS		
① FC-1	CARRIER FX4B030005	HORIZ. FAN COIL UNIT	797	115	.50	23.8	--	--	HP-1	1/3	240	1	OPER.WT.= 150#
② FC-2	CARRIER FX4B042008	HORIZ. FAN COIL UNIT	1375	115	.50	42.0	--	--	HP-2	1/2	240	1	OPER.WT.= 185#
③ FC-3	CARRIER FX4B048010	HORIZ. FAN COIL UNIT	1480	343	.50	48.0	--	--	HP-3	3/4	240	1	OPER.WT.= 190#

FAN SCHEDULE

MARK	MAKE & MODEL	CONTROL	CFM	E.S.P.	RPM	SONES	ELECT. CHARACTERISTICS				REMARKS
							ITEM	LOAD	VOLTS	Ø	
① CEF-1	BROAN L200	INTERLOCK W/ LIGHTSWITCH	210	--	--	1.7	FLA	1.8	115	1	OP.WT.= 35#
① CEF-2	BROAN L150	INTERLOCK W/ LIGHTSWITCH	160	--	--	1.5	FLA	1.3	115	1	OP.WT.= 35#

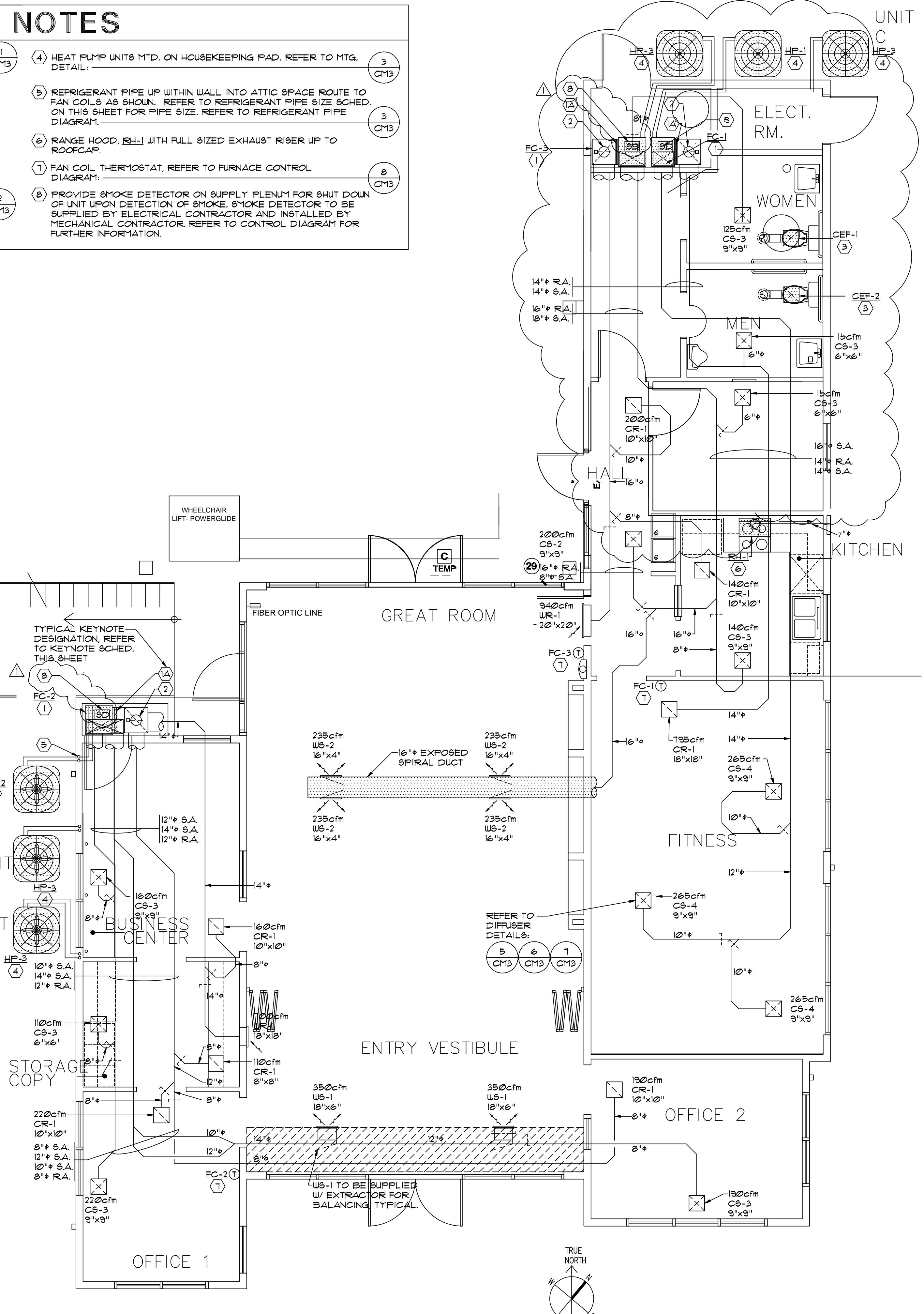
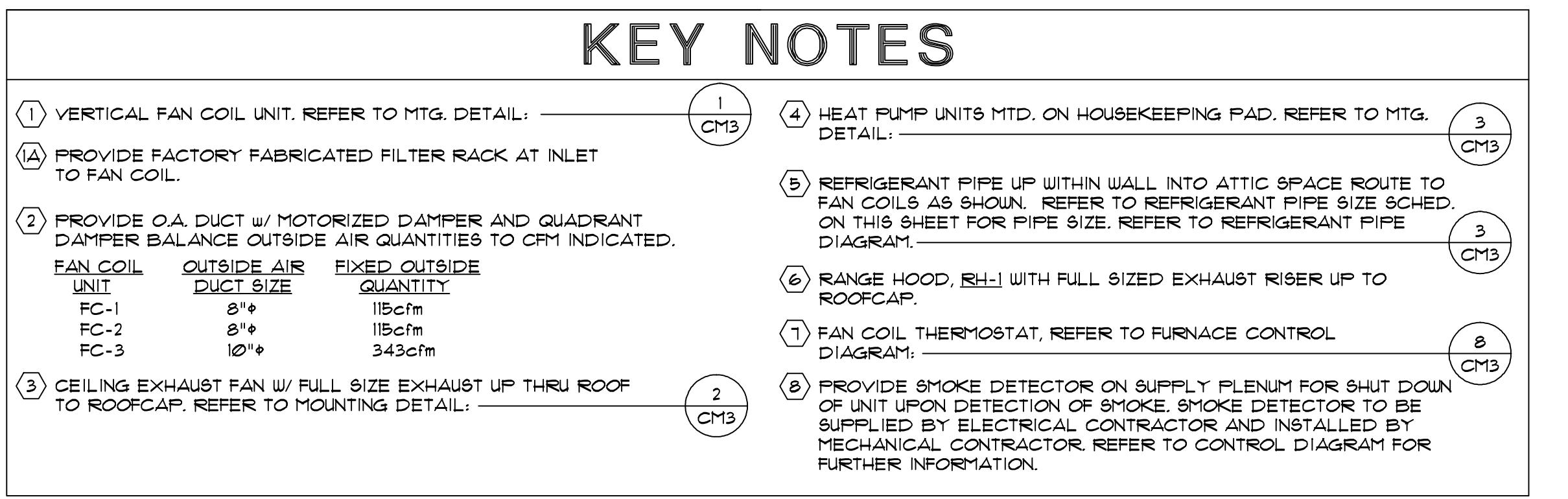
KITCHEN HOOD SCHEDULE

MARK	MAKE & MODEL	CONTROL	SIZE	CFM	E.S.P.	RPM	SONES	ELECT. CHARACTERISTICS				REMARKS
								ITEM	LOAD	VOLTS	Ø	
RH-1	BROAN 4224	THRU SWITCH ON HOOD	24" WIDE	190	---	---	6.0	AMPS	2.5	115	1	CONFIRM COLOR WITH ARCHITECT

EXHAUST FAN SCHEDULE
KEYNOTE SCHEDULE

① PROVIDE CEILING MOUNTED EXHAUST FAN W/ THE FOLLOWING OPTIONS:
A) BAROMETRIC BACKDRAFT DAMPER
B) WALL OR ROOFCAP
C) TIME DELAY SWITCH FAN TO OPERATE FOR 15 MINUTES AFTER THE LIGHTS ARE TURNED OFF.

GRILLE, REGISTER & DIFFUSER SCHEDULE											
MARK	MAKE	MODEL	SIZE	DEFLECTION	Mounting	T-BAR PANEL	OBD	REMARKS (SEE BELOW)			
CS-4	NAILOR	7500-0--	SEE PLAN	---	CEILING	NO	YES	W/ AW APPLIANCE	WHITE FINISH		
CS-3	NAILOR	7500-0--	BS-AW	SEE PLAN	CEILING	NO	YES	W/ AW APPLIANCE	WHITE FINISH		
CS-2	NAILOR	7500-0--	BS-AW	SEE PLAN	CEILING	NO	YES	W/ AW APPLIANCE	WHITE FINISH		
CR-1	NAILOR	5145H	---	---	CEILING	NO	--	W/ AW APPLIANCE	WHITE FINISH		
WR-1	NAILOR	5145H	SEE PLAN	---	WALL	NO	--	TO BE PRIME	PAINTED		
WS-1	NAILOR	61DH	SEE PLAN	---	WALL	NO	--	TO BE PRIME	PAINTED		
WS-2	NAILOR	61DHC--S	AW-ADEX	SEE PLAN	DUCT	NO	DAMPER EXTRACTOR	W/ AW APPLIANCE	WHITE FINISH		

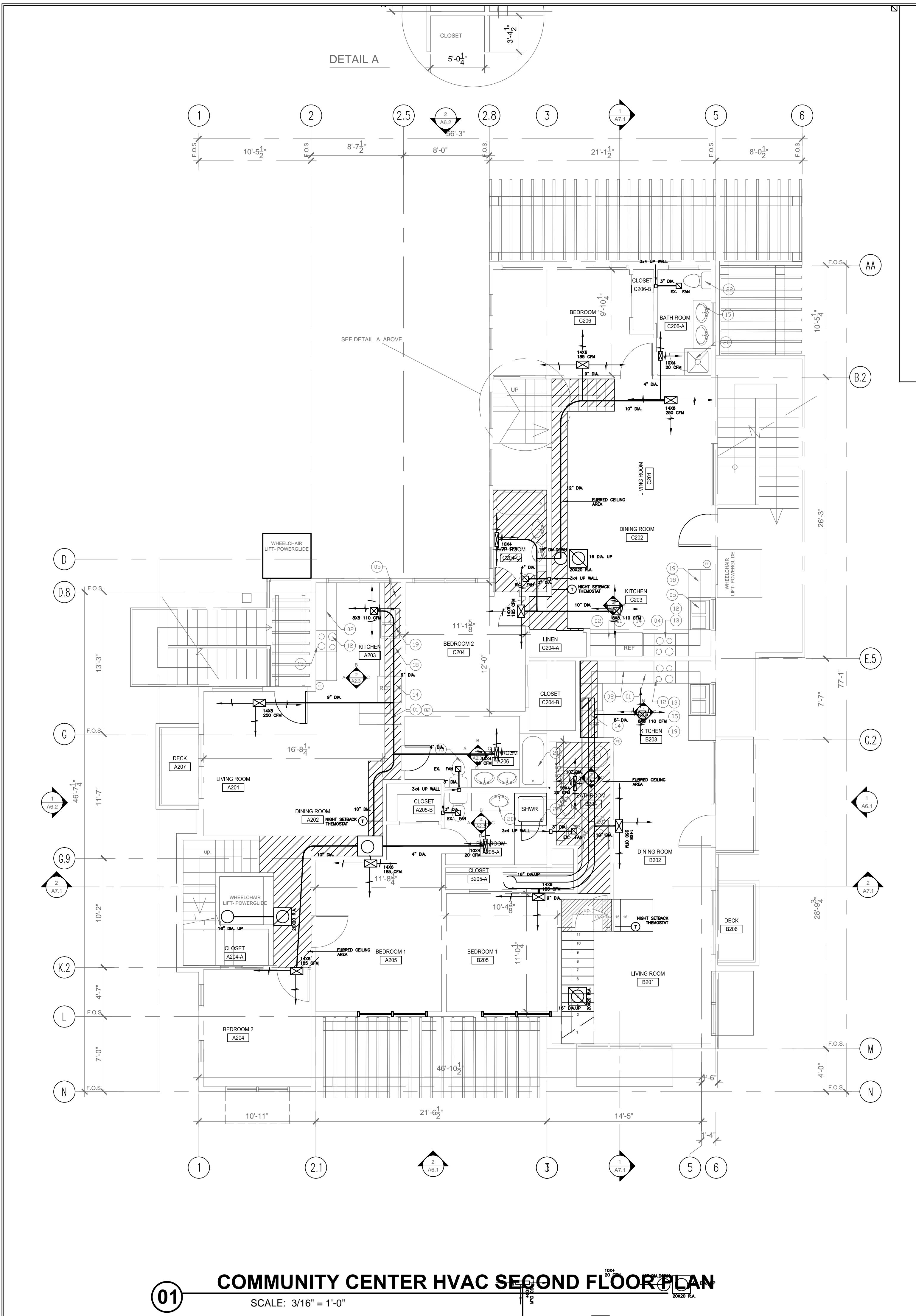


REVISIONS BY
BY
RECEIVED
JOSEPH OAKLEY JR.
No. 15457
RECEIVED 9-30-11
STATE OF CALIFORNIA

OAKLEY & OAKLEY
ARCHITECTS CIVIL & STRUCTURAL ENGINEERS
7700 EGEWATER DRIVE, STE. 615
OAKLAND, CA 94621
FAX: 510-567-5604

PROJECT TITLE: COMMUNITY CENTER
HARBOR PARK APARTMENTS
969 PORTER STREET, VALLEJO, CA 94560
DRAWING TITLE:

Date: 08/30/2011
Scale: AS NOTED
Drawn: STAFF
Checked: RY
Job No.: 2011-09
Sheet: M01
Of Sheets



EQUIPMENT SCHEDULE-RESIDENCES

GAS FURNACE UNIT EQUIPMENT SCHEDULE.											
MARK	MAKE & MODEL	DESCRIPTION	CAPACITY			ELECT. CHARACTERISTICS				REMARKS	
			CFM	SP	HEATING MBH	IN	OUT	ROW	BLOWER		
GF-1	RGRM-04-MAES	GAS FURNACE	1800	10	100	45	42	--	11X7 12X16	95.0%	FLA MCA 8.7 110/60 1 SHIPPING WT-117 LBS

COOLING COIL EQUIPMENT SCHEDULE APARTMENT UNITS														
MARK	MAKE & MODEL	DESCRIPTION	CAPACITY			ELECT. CHARACTERISTICS				REMARKS				
			CFM	MIN Q	ESP	HEATING MBH	AFUE	COOLING MBH	EER					
GF-1	RHEEM RFCA HM 24 14 A C	CASED COOLING COIL	1200	--	.46	--	--	18	24	16	--	--	--	OPER.WT.= 56 #

EXHAUST FAN SCHEDULE										
MARK	MAKE & MODEL	CONTROL	CAPACITY			ELECT. CHARACTERISTICS				REMARKS
			CFM	E.S.P.	RPM	SONES	ITEM	LOAD VOLTS	Ø	
EF4	BROAN 688	SWITCH	50	.1*	--	1.5	FLA .8	115	1	OP.WT.=35#

MECHNICL & ELECTRICAL LEGEND

ELECTRICAL NOTES:

- ALL OUTLETS SERVING KITCHEN COUNTERTOPS TO HAVE GFCI PROTECTION. CEC 210-8(a)-3.
- PROVIDE 2 SEPARATE 20 AMP CIRCUITS FOR KITCHEN SMALL APPLIANCES, WITH NO OTHER OUTLETS ON THE CIRCUITS. CEC 220-4(b), 210-52(b).
- PROVIDE AT LEAST ONE 20 AMP CIRCUIT FOR BATHROOM OUTLETS, WITH NO OTHER OUTLETS ON THE CIRCUITS. CEC 210-52(d).

4. PRIMARY LIGHTING FOR KITCHEN AND BATHROOMS SHALL BE FLUORESCENT.

5. CLOTHES CLOSET LAMPS SHALL BE ENCLOSED IF INCANDESCENT TYPE. LIGHT FIXTURE CLEARANCES SHALL CONFORM TO CEC 410-8.

6. ALL EXTERIOR LIGHTS TO BE WEATHERPROOF.

7. OUTLETS ALONG WALL TO BE MAX 12 FT ON CENTER INCLUDING WALL SPACES 2' WIDE OR MORE (NO POINT ALONG THE WALL SHALL BE MORE THAN 6 FT FROM AN OUTLET).

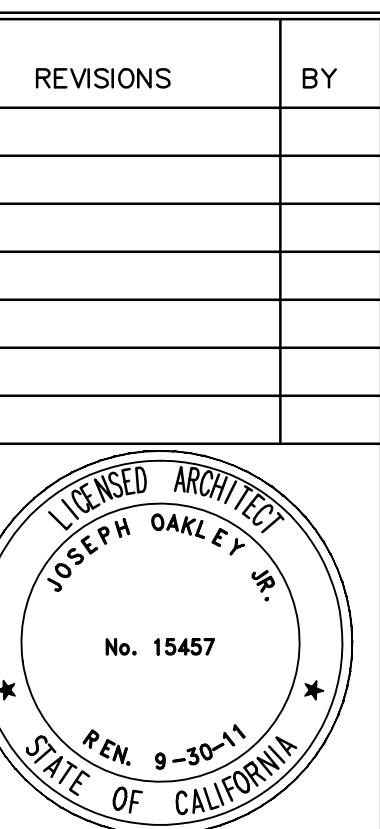
9. EXHAUST FANS AT BATHROOM SHALL COMPLY WITH CBC 1203.3.

- SUPPLY AIR DUCT
- RETURN AIR DUCT
- F.D. FIRE DAMPER
- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER
- AIR REGISTER IN FLOOR
- AIR REGISTER IN TOE SPACE
- AIR REGISTER IN CEILING
- (E) VENT
- H.B. HOSE BIBB
- G GAS

ELECTRICAL

- HARD WIRED INTERCONNECTED SMOKE DETECTOR WITH BATTERY BACK UP.
- RECESSED CAN LIGHT FIXTURE
- 26 WATT FLUORESCENT FIXTURE, WITH 13" DIA. MATTE WHITE LENS. 1175BN SATURN CEILING FIXTURE BY LITHONIA-13" DIA.
- CEILING FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- WALL MOUNTED FLOOD LIGHTS
- MINI-FLUORESCENT FIXTURE MOUNTED UNDER CABINET (I.E. IN KITCHEN)
- FLUOR. FIXTURE IN LIGHTS SOFFIT WITH DIFFUSER (I.E. IN BATHROOMS)
- SURFACE MOUNTED FLUOR. FIXTURE W/ ENCLOSED DIFFUSER AT LAUNDRY & EXPOSED TUBE IN GARAGE
- DUPLEX RECEPTACLE +12" TYP.
- SWITCH W/ DIMMER +54 TYP.
- SWITCH +54 TYP.
- TELEPHONE RECEPTACLE +48" TYP.
- TELEVISION RECEPTACLE +12" TYP.
- FAX JACK +48" TYP., U.O.N.
- 220 V RECEPTACLE +12" TYP.
- INTERCOM
- DOOR BELL
- ELECTRICAL PANEL BD.
- SCONCE
- 3-WAY OUTLET +12" TYP., U.O.N.
- EPB ELECTRICAL PANEL BOARD
- (G) GARBAGE DISPOSER
- AFCI

ALL 125 AMP CIRCUITS SHALL BE ARC-FAULT INTERRUPTER PROTECTED INCLUDING ALL OUTLETS & SWITCHES



OAKLEY & OAKLEY
ARCHITECTS CIVIL & STRUCTURAL ENGINEERS
7700 EGEWATER DRIVE, STE. 615
OAKLAND, CA 94621
FAX: 510-563-6043

PROJECT TITLE: COMMUNITY CENTER
HARBOR PARK APARTMENTS
969 PORTER STREET, VALLEJO, CA 94560
DRAWING TITLE:

Date: 08/30/2011
Scale: AS NOTED
Drawn: STAFF
Checked: RY
Job No.: 2011-09
Sheet:

M03
0f Sheets

MECHANICAL & ELECTRICAL LEGEND

ELECTRICAL NOTES:

ALL OUTLETS SERVING KITCHEN COUNTERTOPS
HAVE GFCI PROTECTION. CEC 210-8(a)-3.

PROVIDE 2 SEPARATE 20 AMP CIRCUITS FOR
KITCHEN SMALL APPLIANCES, WITH NO OTHER OUTLETS
IN THE CIRCUITS. CEC 220-4(b), 210-52(b).

PROVIDE AT LEAST ONE 20 AMP CIRCUIT FOR
BATHROOM OUTLETS, WITH NO OTHER OUTLETS ON
THE CIRCUITS. CEC 210-52(d).

PRIMARY LIGHTING FOR KITCHEN AND BATHROOMS
SHALL BE FLUORESCENT.

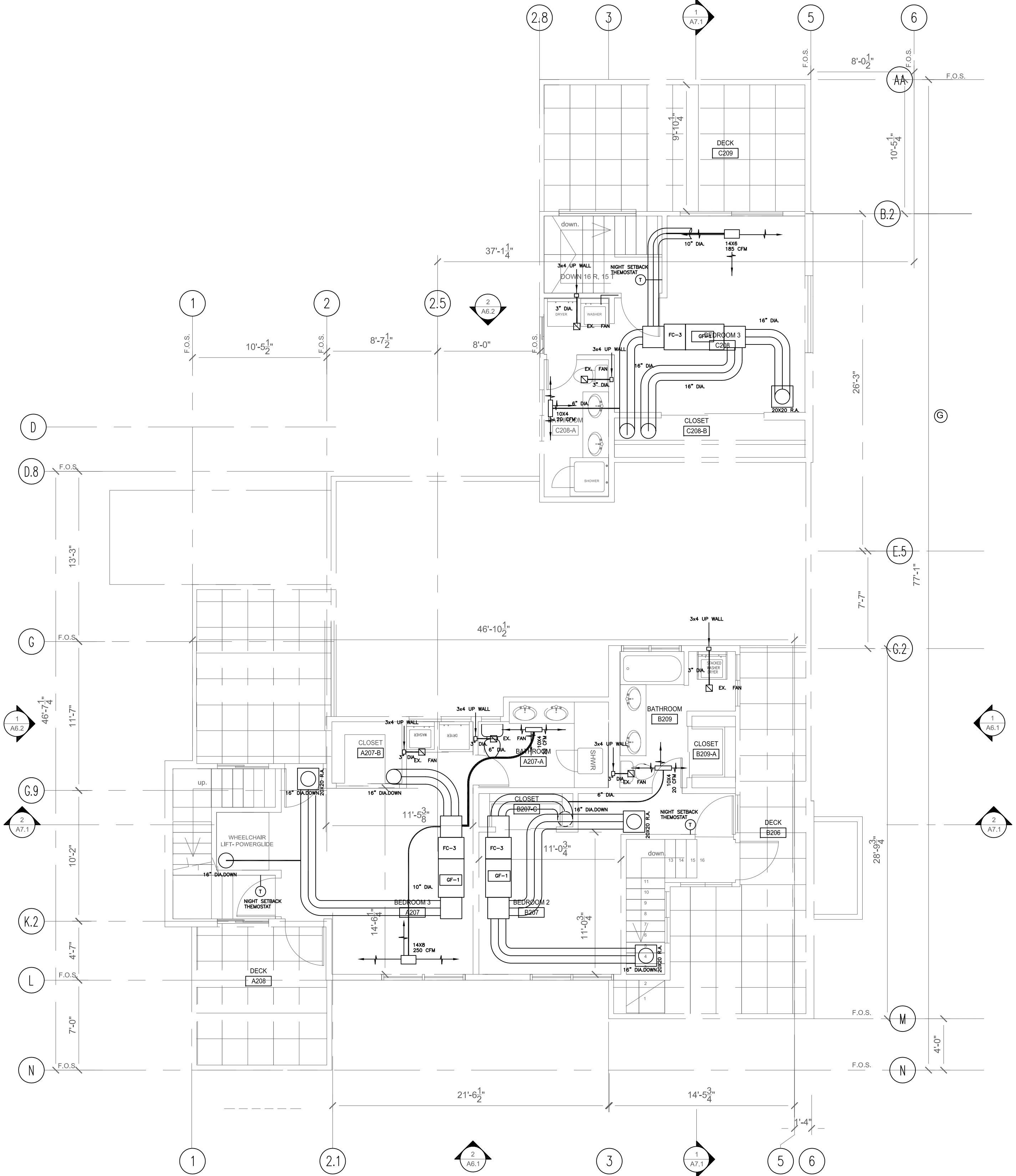
CLOTHES CLOSET LAMPS SHALL BE ENCLOSED IF
INCANDESCENT TYPE. LIGHT FIXTURE CLEARANCES
SHALL CONFORM TO CEC 410-8.

ALL EXTERIOR LIGHTS TO BE WEATHERPROOF.

~~~~~

OUTLETS ALONG WALL TO BE MAX 12 FT ON CENTER  
INCLUDING WALL SPACES 2' WIDE OR MORE  
NO POINT ALONG THE WALL SHALL BE MORE THAN 6 FT  
FROM AN OUTLET).

EXHAUST FANS AT BATHROOM SHALL COMPLY WITH  
BC 1203.3.



# COMMUNITY CENTER HVAC THIRD FLOOR PLAN

SCALE: 3/16" = 1'-0"

## **SUPPLY AIR DUCT**

— F.D. RETURN AIR DUCT

 FIRE DAMPER

 SUPPLY AIR DIFFUSER

 RETURN AIR DIFFUSER

 AIR REGISTER IN FLOOR

 AIR REGISTER IN TOE SPACE

 AIR REGISTER IN CEILING

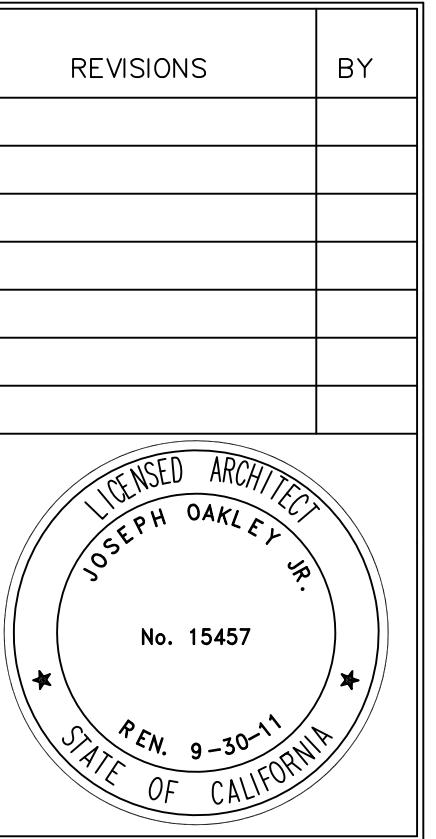
 (E) VENT

## ELECTRICAL

● HARD WIRED INTERCONNECTED SMOKE  
DETECTOR WITH BATTERY BACK UP.

- RECESSED CAN LIGHT FIXTURE
- 〔F〕 26 WATT FLUORESECNT FIXTURE, WITH 13' DIA. MATTE WHITE LENS.  
1175BN SATURN CEILING FIXTURE BY LITHONIA-13" DIA.
- CEILING FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- △ WALL MOUNTED FLOOD LIGHTS
- MINI-FLUORESCENT FIXTURE MOUNTED  
UNDER CABINET (I.E. IN KITCHEN)
- FLUOR. FIXTURE IN LIGHTS SOFFIT  
WITH DIFFUSER (I.E. IN BATHROOMS)
- □ SURFACE MOUNTED FLUOR. FIXTURE W/  
ENCLOSED DIFFUSER AT LAUNDRY &  
EXPOSED TUBE IN GARAGE
- DUPLEX RECEPTACLE +12" TYP.
- D SWITCH W/ DIMMER +54 TYP.
- SWITCH +54 TYP.
- TELEPHONE RECEPTACLE +48" TYP
- TV TELEVISION RECEPTACLE +12" TYP.
- F FAX JACK +48" TYP., U.O.N.
- 220 V RECEPTACLE +12" TYP.
- INTERCOM
- DOOR BELL
- ELECTRICAL PANEL BD.
- SCONCE
- 3 3-WAY OUTLET +12" TYP., U.O.N.
- EPB ELECTRICAL PANEL BOARD
- G GARBAGE DISPOSER
- AFCI ALL 125 AMP CIRCUITS SHALL BE ARC-FAULT INTERRUPTER  
PROTECTED INCLUDING ALL OUTLETS & SWITCHES

 ALL 125 AMP CIRCUITS SHALL BE ARC-FAULT INTERRUPTER  
PROTECTED INCLUDING ALL OUTLETS & SWITCHES

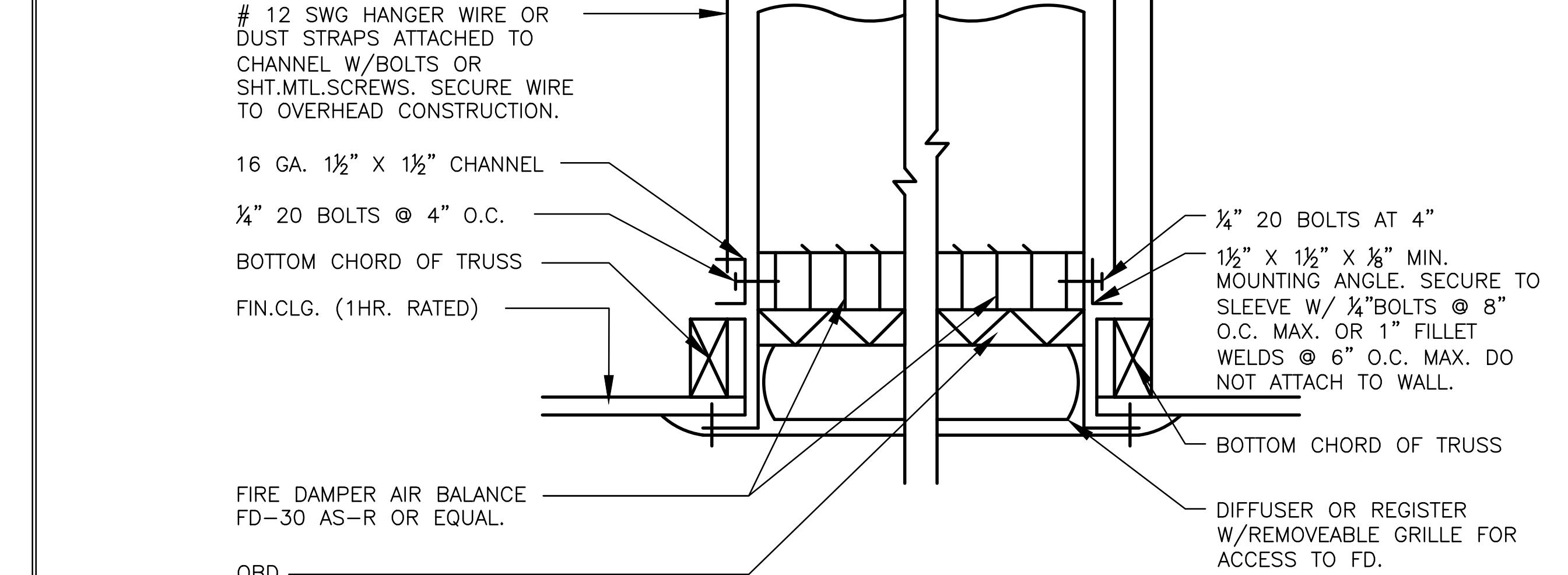


AKLEY & OAKES  
ARCHITECT, CIVIL & STRUCTURAL ENGINEERS  
7000 EDGEWATER DRIVE, STE. 615  
AKLAND, CA 94621  
10.562.6028  
AX. 510.562.6043

PROJECT TITLE: COMMUNITY CENTER  
DRAWING TITLE: ARBOR PARK APARTMENTS  
659 PORTER STREET, VALLEJO, CA 94560

Date: 08/30/2011  
Scale: AS NOTED  
Drawn: STAFF  
Checked: RY  
Job No.: 2011-09  
Sheet:

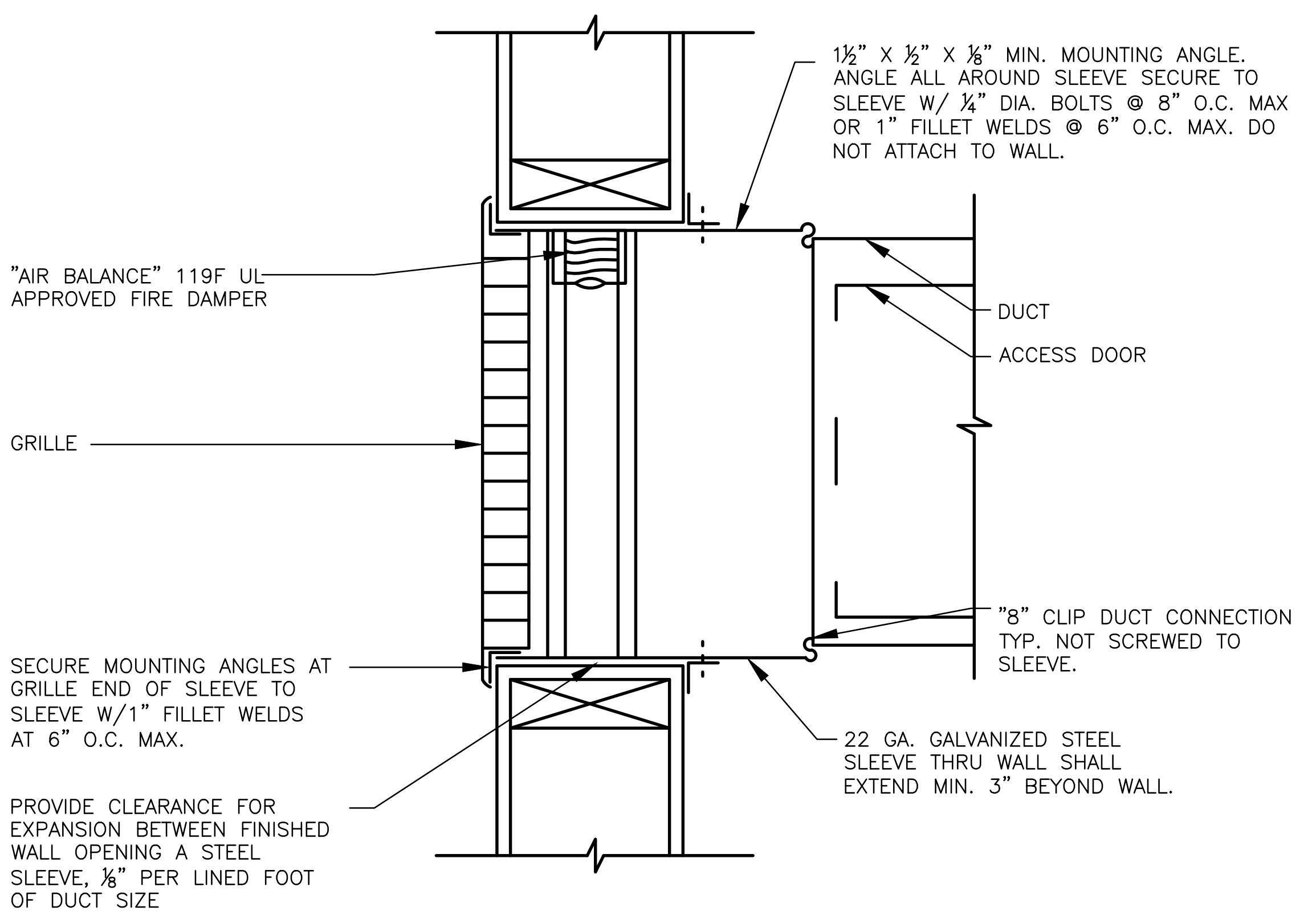
# M04



NOTE:  
COMPLETE INSTALLATION SHALL BE  
PER STATE FIRE MARSHALL'S LISTING.

**1** CEILING FIRE DAMPER DETAIL

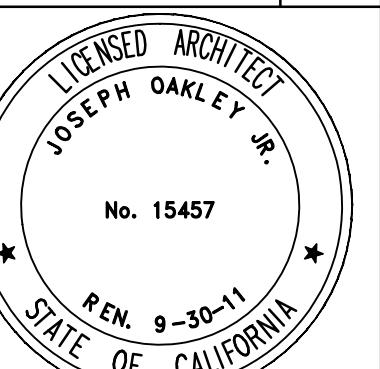
NOT TO SCALE



NOTE:  
1. COMPLETE INSTALLATION SHALL BE AS PER STATE FIRE MARSHALL'S LISTING.  
2. REFER TO ARCHITECT FOR MOUNTING HEIGHT.

**2** GRILLE & FIRE DAMPER DETAIL

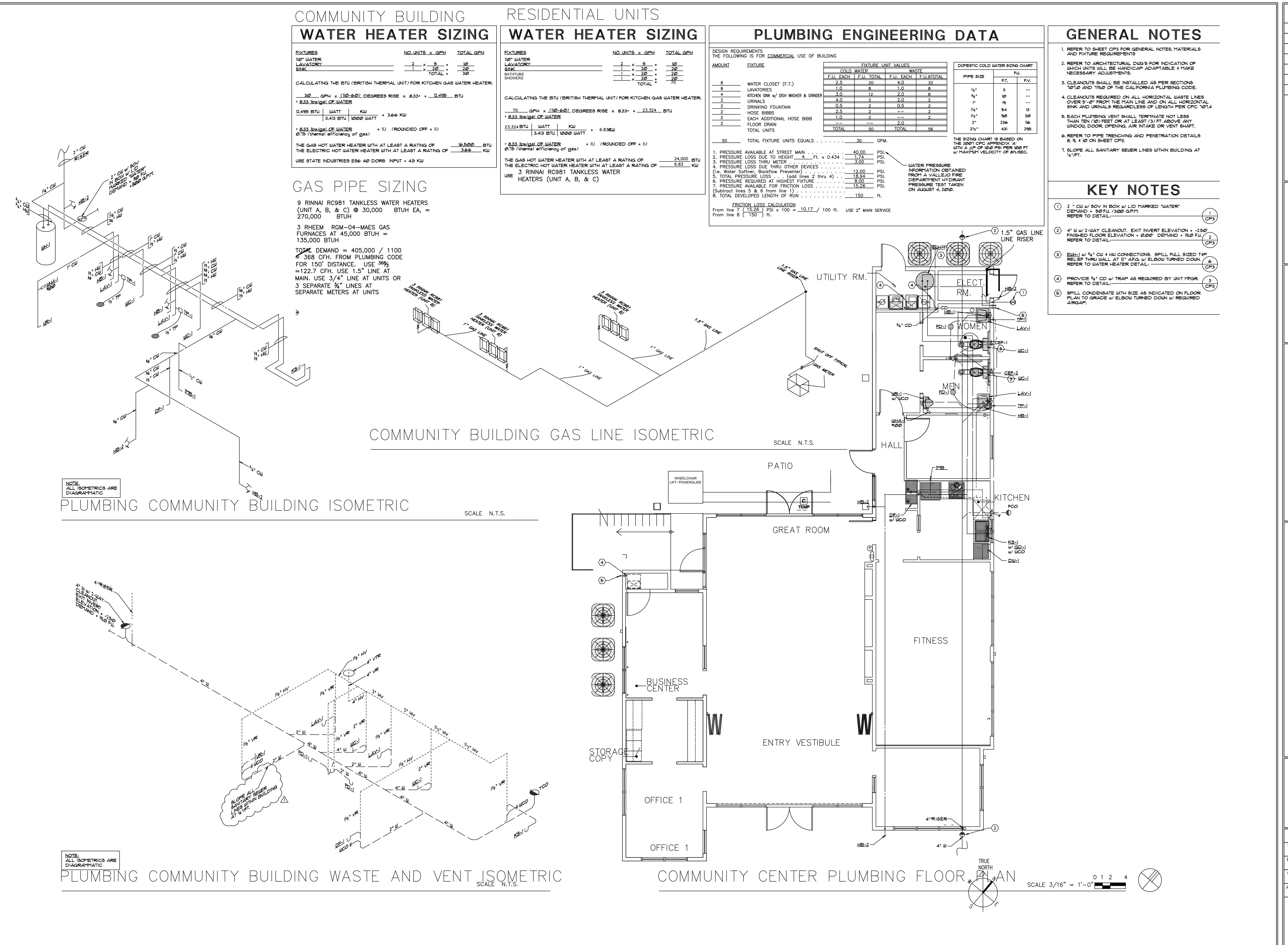
NOT TO SCALE

| REVISIONS                                                                                                                                                       | BY |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|                                                                                                                                                                 |    |
|                                                                                                                                                                 |    |
|                                                                                                                                                                 |    |
|                                                                                                                                                                 |    |
|                                                                                                                                                                 |    |
| <br>JOSEPH OAKLEY JR.<br>No. 15457<br>RENEWED 9-30-11<br>STATE OF CALIFORNIA |    |
|                                                                                                                                                                 |    |
|                                                                                                                                                                 |    |

|                                                                                                                                                                                                                                                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  <b>OAKLEY &amp; OAKLEY</b><br>ARCHITECTS CIVIL & STRUCTURAL ENGINEERS<br>7700 EDGEWATER DRIVE, STE. 615<br>OAKLAND, CA 94621<br>TEL: 510-562-6043<br>FAX: 510-562-6043 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

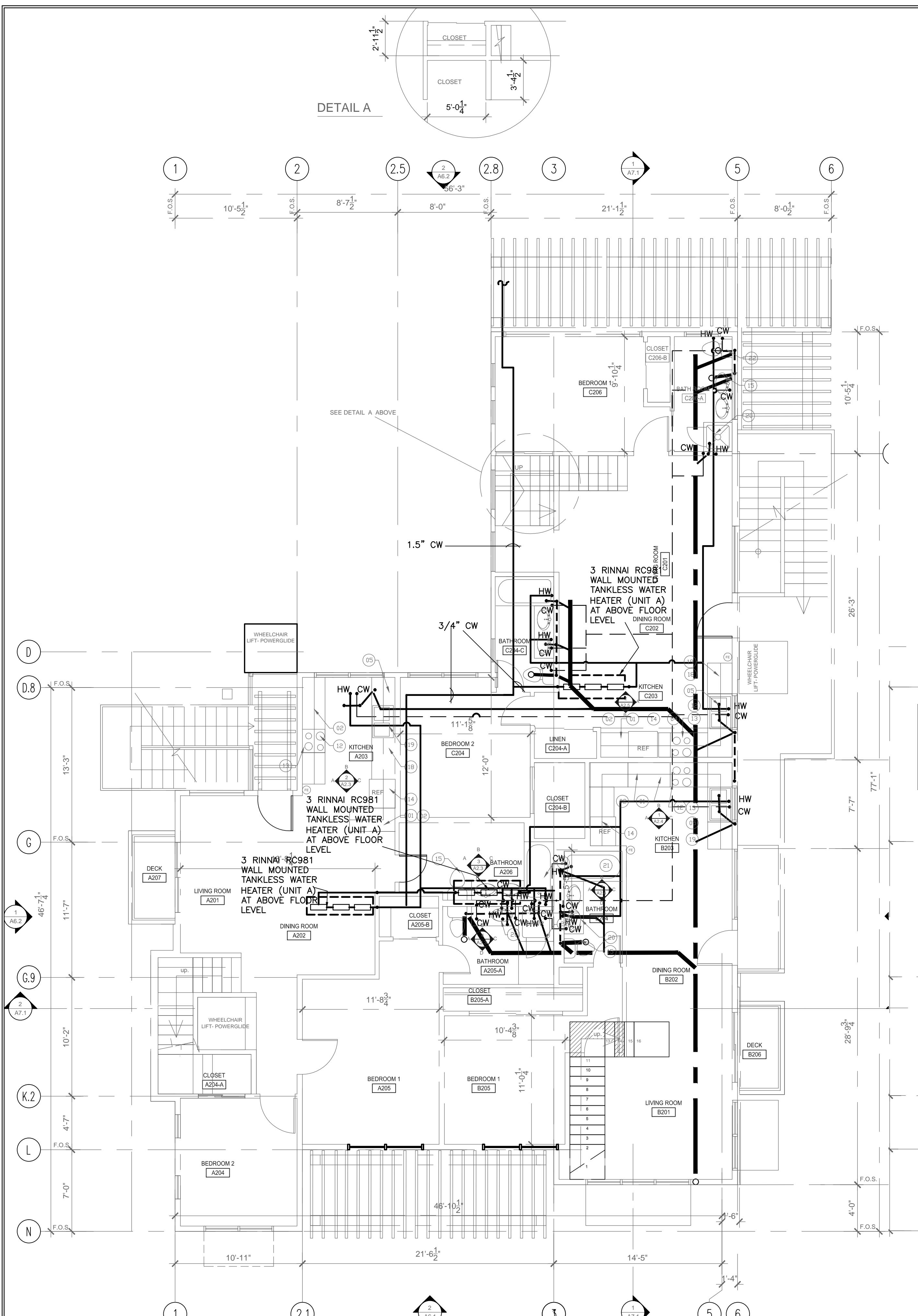
|                                                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------|--|
| PROJECT TITLE: COMMUNITY CENTER<br>HARBOR PARK APARTMENTS<br>969 PORTER STREET, VALLEJO, CA 94560<br>DRAWING TITLE: |  |
|                                                                                                                     |  |
|                                                                                                                     |  |

|          |            |
|----------|------------|
| Date:    | 08/30/2011 |
| Scale:   | AS NOTED   |
| Drawn:   | STAFF      |
| Checked: | RY         |
| Job No.: | 2011-09    |
| Sheet:   | <b>M5</b>  |
| Of       | Sheets     |



# 01 COMMUNITY CENTER SECOND FLOOR PLUMBING PLAN

SCALE: 1/4" = 1'-0"



# 02 COMMUNITY CENTER THIRD FLOOR PLUMBING PLAN

SCALE: 1/4" = 1'-0"

## MECHANICAL & ELECTRICAL LEGEND

### CRITICAL NOTES:

ALL OUTLETS SERVING KITCHEN COUNTERTOPS  
HAVE GFCI PROTECTION. CEC 210-8(a)-3.

PROVIDE 2 SEPARATE 20 AMP CIRCUITS FOR  
KITCHEN SMALL APPLIANCES, WITH NO OTHER OUTLETS  
ON THE CIRCUITS. CEC 220-4(b), 210-52(b).

PROVIDE AT LEAST ONE 20 AMP CIRCUIT FOR  
BATHROOM OUTLETS, WITH NO OTHER OUTLETS ON  
THE CIRCUITS. CEC 210-52(d).

PRIMARY LIGHTING FOR KITCHEN AND BATHROOMS  
SHALL BE FLUORESCENT.

CLOTHES CLOSET LAMPS SHALL BE ENCLOSED IF  
INCANDESCENT TYPE. LIGHT FIXTURE CLEARANCES  
SHALL CONFORM TO CEC 410-8.

ALL EXTERIOR LIGHTS TO BE WEATHERPROOF.

ALL OUTLETS ALONG WALL TO BE MAX 12 FT ON CENTER  
(INCLUDING WALL SPACES 2' WIDE OR MORE  
A POINT ALONG THE WALL SHALL BE MORE THAN 6 FT  
FROM AN OUTLET).

EXHAUST FANS AT BATHROOM SHALL COMPLY WITH  
CEC 1203.3.

|                   |                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------|
|                   | SUPPLY AIR DUCT                                                                                                    |
|                   | RETURN AIR DUCT                                                                                                    |
| F.D.              | FIRE DAMPER                                                                                                        |
|                   | SUPPLY AIR DIFFUSER                                                                                                |
|                   | RETURN AIR DIFFUSER                                                                                                |
|                   | AIR REGISTER IN FLOOR                                                                                              |
|                   | AIR REGISTER IN TOE SPACE                                                                                          |
|                   | AIR REGISTER IN CEILING                                                                                            |
| V                 | (E) VENT                                                                                                           |
| H.B.              | HOSE BIBB                                                                                                          |
| G                 | GAS                                                                                                                |
| <u>ELECTRICAL</u> |                                                                                                                    |
|                   | HARD WIRED INTERCONNECTED SMOKE DETECTOR WITH BATTERY BACK UP.                                                     |
|                   | RECESSED CAN LIGHT FIXTURE                                                                                         |
|                   | 26 WATT FLUORESECNT FIXTURE, WITH 13' DIA. MATTE WHITE LENS.<br>1175BN SATURN CEILING FIXTURE BY LITHONIA-13" DIA. |
|                   | CEILING FIXTURE                                                                                                    |
|                   | WALL MOUNTED LIGHT FIXTURE                                                                                         |
|                   | WALL MOUNTED FLOOD LIGHTS                                                                                          |
|                   | MINI-FLUORESCENT FIXTURE MOUNTED UNDER CABINET (I.E. IN KITCHEN)                                                   |
|                   | FLUOR. FIXTURE IN LIGHTS SOFFIT WITH DIFFUSER (I.E. IN BATHROOMS)                                                  |
|                   | SURFACE MOUNTED FLUOR. FIXTURE W/ ENCLOSED DIFFUSER AT LAUNDRY & EXPOSED TUBE IN GARAGE                            |
|                   | DUPLEX RECEPTACLE +12" TYP.                                                                                        |
| D                 | SWITCH W/ DIMMER +54 TYP.                                                                                          |
|                   | SWITCH +54 TYP.                                                                                                    |
|                   | TELEPHONE RECEPTACLE +48" TYP                                                                                      |
| TV                | TELEVISION RECEPTACLE +12" TYP.                                                                                    |
| F                 | FAX JACK +48" TYP., U.O.N.                                                                                         |
|                   | 220 V RECEPTACLE +12" TYP.                                                                                         |
|                   | INTERCOM                                                                                                           |
|                   | DOOR BELL                                                                                                          |
|                   | ELECTRICAL PANEL BD.                                                                                               |
|                   | SCONCE                                                                                                             |
| 3                 | 3-WAY OUTLET +12" TYP., U.O.N.                                                                                     |
|                   | ELECTRICAL PANEL BOARD                                                                                             |
|                   | GARBAGE DISPOSER                                                                                                   |
|                   | ALL 125 AMP CIRCUITS SHALL BE ARC-FAULT INTERRUPTER                                                                |

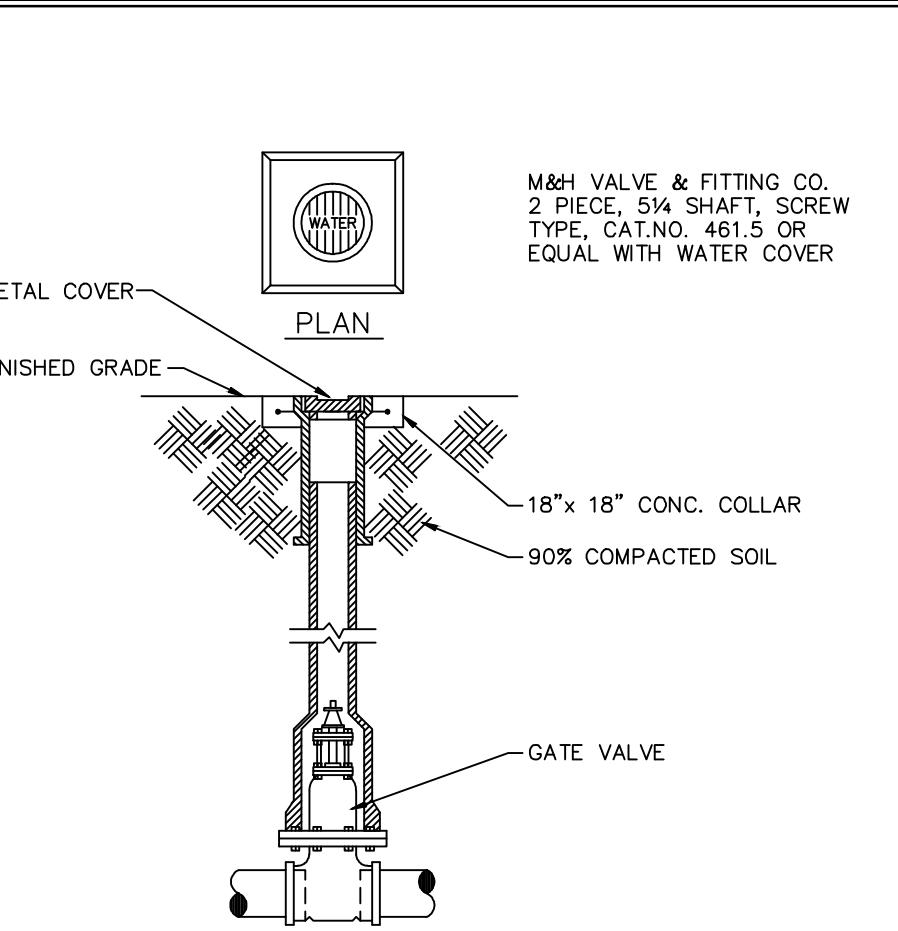
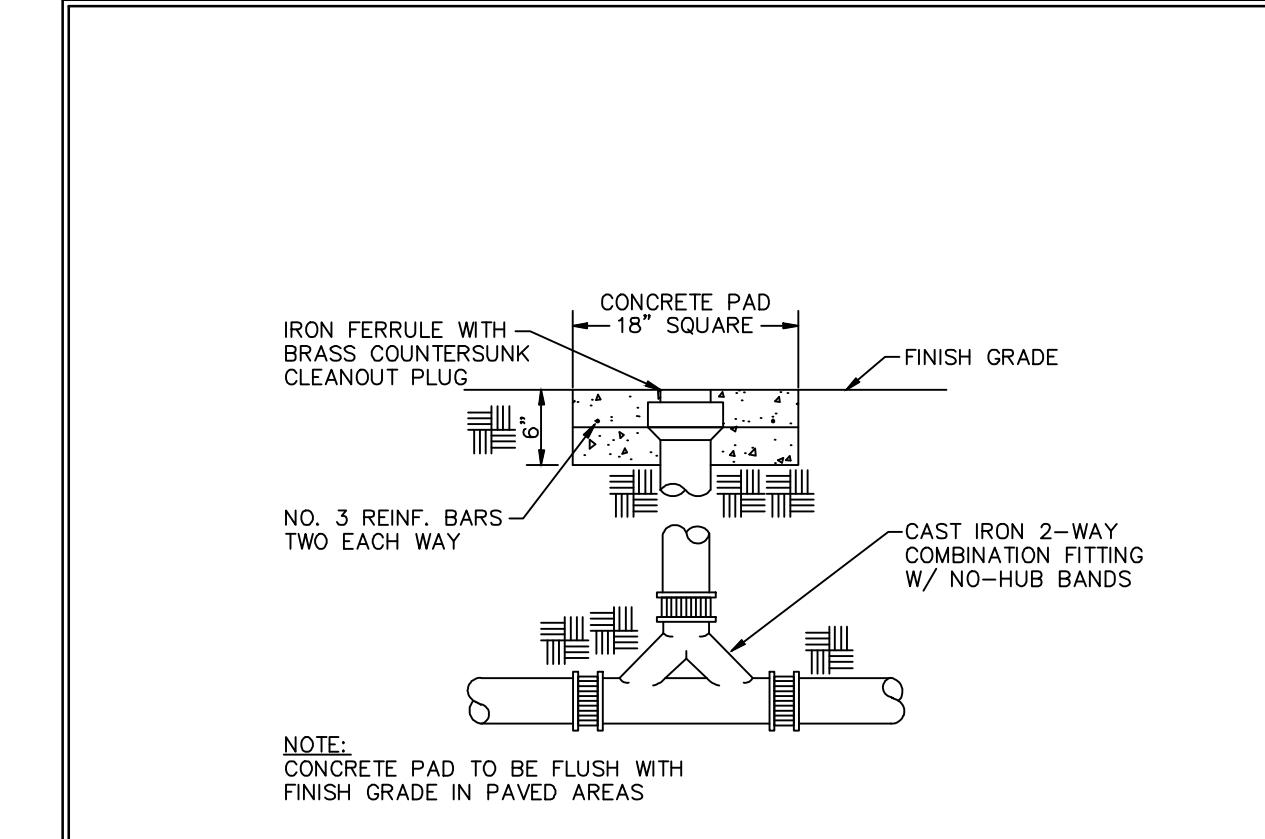
COMMUNITY CENTER  
ARBOR PARK APARTMENTS  
669 PORTER STREET, VALLEJO, CA 94560

COMI  
ARBOR F  
69 PORT  
DRAWING FILE

e: 08/30/2012  
e: AS NOTED  
vn: STAFF  
cked: RY  
No.: 2011-09

P2

Sheets



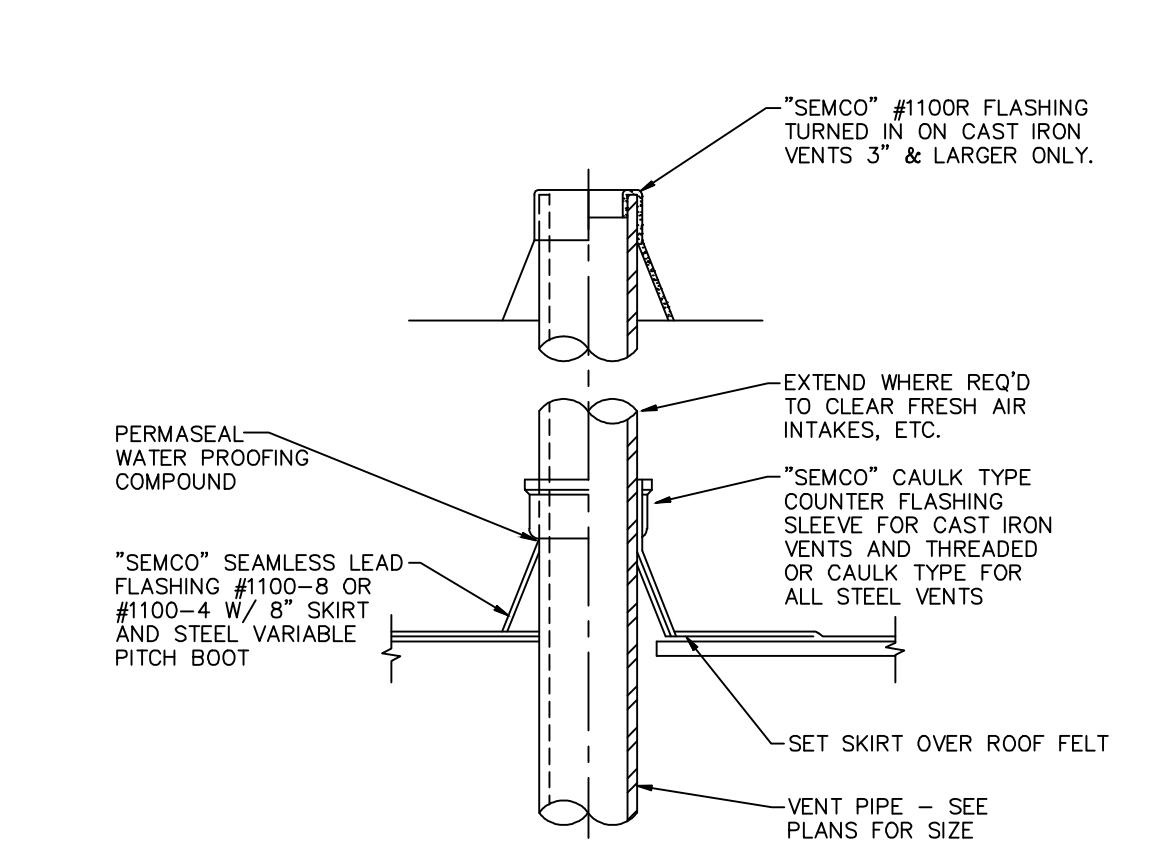
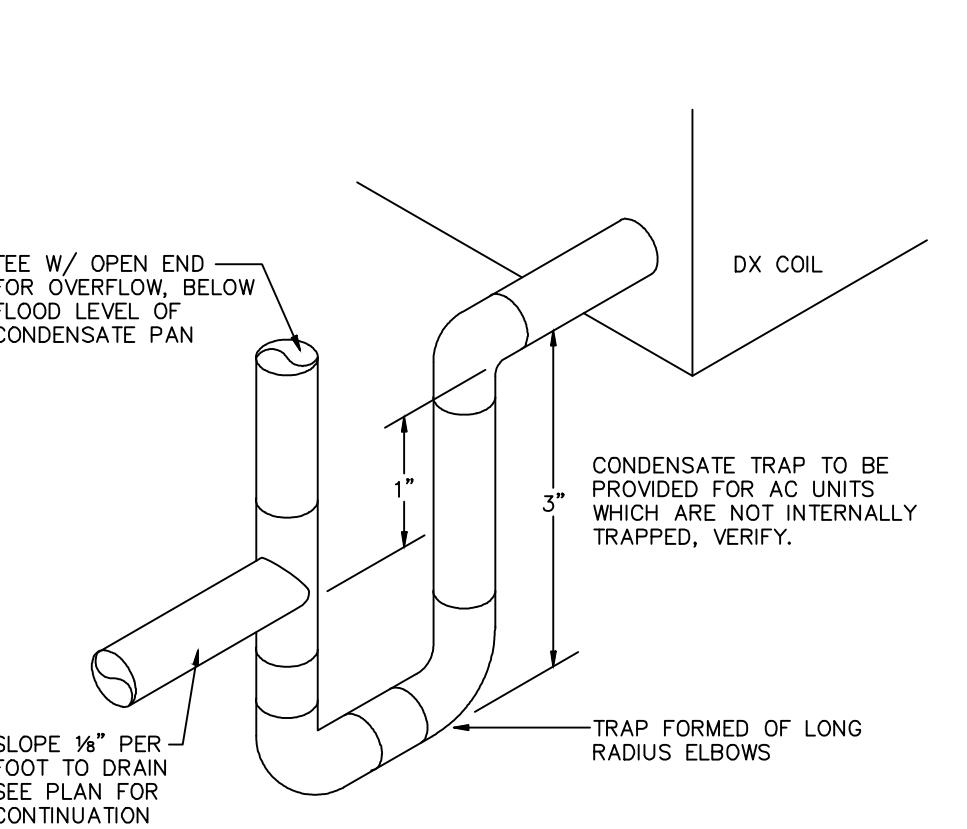
2-WAY CLEANOUT TO GRADE DETAIL

NOT TO SCALE

1 VALVE BOX DETAIL

NOT TO SCALE

2



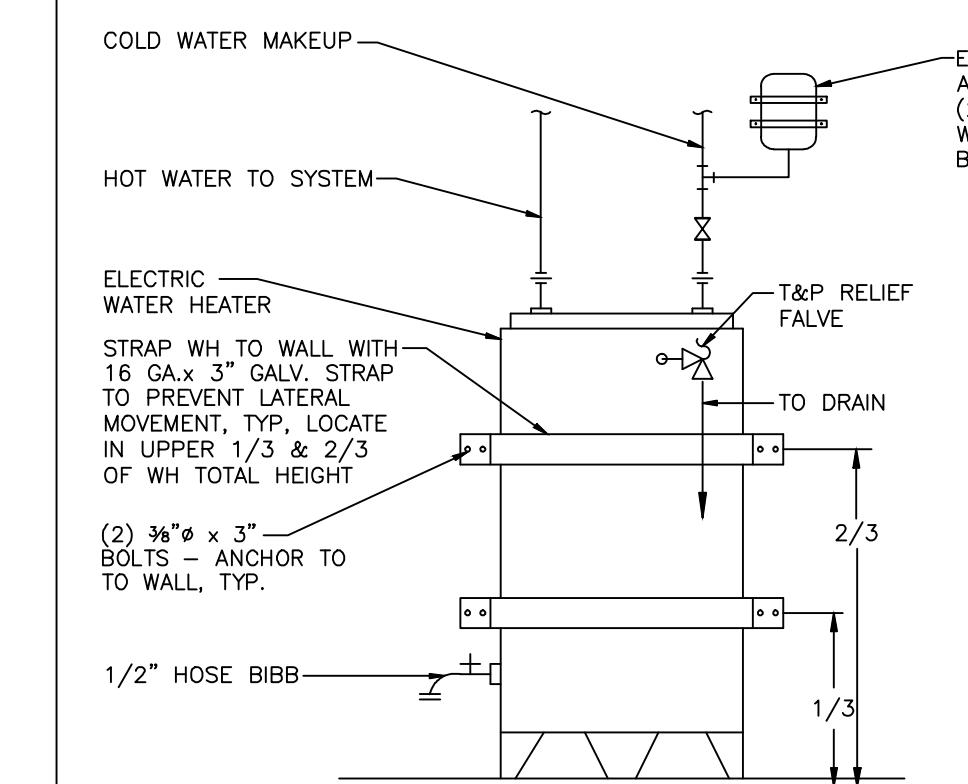
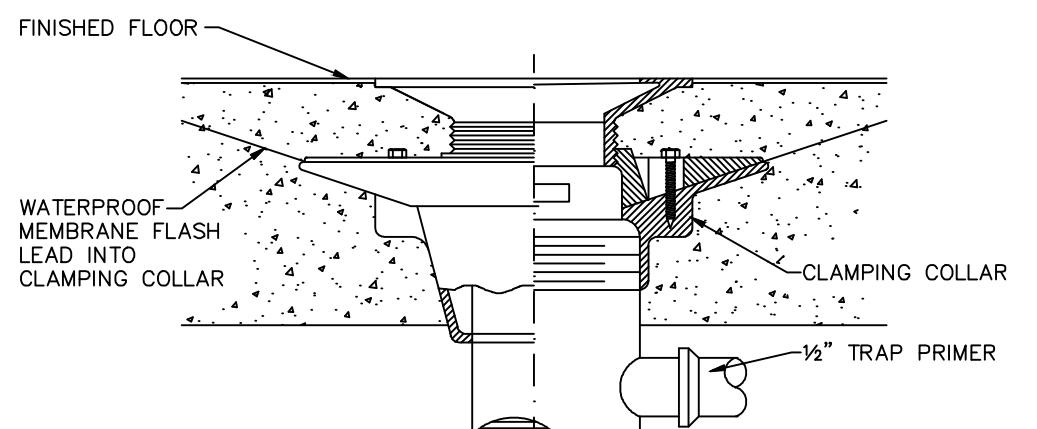
CONDENSATE DRAIN DETAIL

NOT TO SCALE

3 VENT PIPE FLASHING DETAIL

NOT TO SCALE

4



FLOOR DRAIN DETAIL

NOT TO SCALE

5 GAS WATER HEATER MOUNTING DETAIL

NOT TO SCALE

6

TRENCHING NEAR FOOTINGS DETAIL

01

COMMUNITY CENTER THIRD FLOOR PLUMBING PLAN  
FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

8

NOT TO SCALE

9

NOT TO SCALE

10

FOOTINGS DETAIL

NOT TO SCALE

| ■ NEW <input type="checkbox"/> EXISTING |                    | PANEL "C1"                      |               |               |               |               |               |               |               |               |               | AIC: 10K (VERIFY)         |                     |
|-----------------------------------------|--------------------|---------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------|---------------------|
| VOLTAGE: 120/240V-10-3W                 |                    | MOUNTING SURFACE / BOLT-ON      |               |               |               |               |               |               |               |               |               | LOCATION: UTILITY ROOM    |                     |
| BUS:                                    |                    | 200A MOUNTING SURFACE / BOLT-ON |               |               |               |               |               |               |               |               |               | LOAD DESCRIPTION          |                     |
| VOLT-AMPERES                            | CB                 | CB                              | CB            | CB            | CB            | CB            | CB            | CB            | CB            | CB            | CB            | VOLT-AMPERES              | CB                  |
| 1 HEAT PUMP "HP-1"                      | 1,404              | 25                              | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 5,000                     | "FC-3" STRIP HEATER |
| 5 FAN COIL "FC-1" & "FC-3"              | 1,260              | 25                              | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 2,403                     | HEAT PUMP "HP-3"    |
| 7 FC-1" STRIP HEATER                    | 2,500              | 30                              | 30            | 30            | 30            | 30            | 30            | 30            | 30            | 30            | 30            | 2,250                     | WATER HEATER "WH-1" |
| 13 HEAT PUMP "HP-2"                     | 2,184              | 25                              | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 2,250                     | SPARE               |
| 17 FAN COIL "FC-2"                      | 588                | 15                              | 15            | 15            | 15            | 15            | 15            | 15            | 15            | 15            | 15            | 1,404                     | SPARE               |
| 21 FC-2" STRIP HEATER                   | 4,000              | 50                              | 50            | 50            | 50            | 50            | 50            | 50            | 50            | 50            | 50            | 5,000                     | SPARE               |
| 23 SPACE                                | 276                | 25                              | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 2,400                     | AC                  |
| 25 SPACE                                | 276                | 25                              | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 2,400                     | WASHER              |
| 27 GATE MOTOR & ENTRANCE AREA           | 1,376              | 25                              | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 13,586                    | PANEL "C2"          |
| <b>SUBTOTAL</b>                         | <b>11,936</b>      | <b>13,312</b>                   | <b>23,239</b> | <b>21,865</b> | <b>23,239</b> | <b>21,865</b> | <b>23,239</b> | <b>21,865</b> | <b>23,239</b> | <b>21,865</b> | <b>23,239</b> | <b>54,000</b>             | <b>4,800</b>        |
| <b>TOTAL VOLT-AMPERES/PHASE:</b>        | <b>DA = 35,175</b> |                                 |               |               |               |               |               |               |               |               |               | <b>DA = 35,177</b>        |                     |
| <b>TOTAL DESIGN VOLT-AMPERES:</b>       | <b>70,352</b>      |                                 |               |               |               |               |               |               |               |               |               | <b>25% LCL = 831</b>      |                     |
| <b>25% LM = 2,500</b>                   |                    |                                 |               |               |               |               |               |               |               |               |               | <b>DEMAND VA = 73,683</b> |                     |
| <b>AMPS = 307.0</b>                     |                    |                                 |               |               |               |               |               |               |               |               |               |                           |                     |

PROVIDE PANEL WITH 100% RATED NEUTRAL AND GROUND BUSSES.

## NUMBERED NOTES:

1. REFER TO MECHANICAL DRAWINGS FOR EXACT HVAC EQUIPMENT LOCATIONS AND SPECIFICATIONS. VERIFY EQUIPMENT WIRE SIZE, CONDUIT SIZES, CIRCUIT BREAKER AND RECONNECT SIZES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN OF ELECTRICAL.
2. PROVIDE HALF-SWITCHED OUTLET BELOW SINK FOR GARBAGE DISPOSAL AND DISHWASHER.
3. LOCATE SWITCH FOR GARBAGE DISPOSAL CONTROL. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
4. PROVIDE OUTLET FOR GAS RANGE AND CONNECT. VERIFY WITH RANGE INSTALLER PRIOR TO ROUGH-IN.
5. PROVIDE OUTLET AND CONNECTION TO RANGE HOOD. VERIFY WITH RANGE CONTRACTOR PRIOR TO ROUGH-IN.
6. LOCATE OUTLET FOR REFRIGERATOR. VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
7. "LOC" SEE LIGHTING SHEET FOR FURTHER INFORMATION. PROVIDE POWER AND PHONE CONNECTION.
8. FIRE ALARM CONTROL PANEL "FACP." PROVIDE POWER AND PHONE CONNECTION.

## NOTE TO CONTRACTOR

THE CONTRACTOR SHALL THOROUGHLY REVIEW THESE ELECTRICAL CONSTRUCTION DOCUMENTS PRIOR TO PREPARING A BID FOR THE ELECTRICAL WORK SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION DOCUMENTS, ELECTRICAL SERVICES AND CONNECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES FOUND DURING THE SUBMITTING OF THE ELECTRICAL WORK. THE CONTRACTOR, AFFIRMING THAT THE REQUIRED FIELD VERIFICATION OF EXISTING CONDITIONS HAS BEEN COMPLETED AND ASSUMES FULL RESPONSIBILITY FOR CONFLICTS FOUND AFTER THE AWARD OF THE ELECTRICAL CONTRACT. NO ADDITIONAL CONSTRUCTION WILL BE CONSIDERED FOR CONFLICTS AND/OR DISCREPANCIES FOUND TO EXIST AFTER THE AWARD OF THE ELECTRICAL CONTRACT.

## GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL VERIFY ALL CONDUIT, UTILITY COMPANY REQUIREMENTS WITH THE ELECTRICITY COMPANY AND THE TELEPHONE COMPANY PRIOR TO SUBMITTING BID. INCLUDE ALL PULLBOXES, CONDUITS, SPLICE BOXES, TRANSFORMER PAD, TERMINAL BOXES, RISERS, TRENCHING, ETC. AS REQUIRED FOR COMPLETE AND OPERATIONAL SERVICES TO UNITS WHETHER INDIVIDUAL OR GROUP. VERIFY NOTIFICATION POINT OF SERVICE FEED WITH UTILITY COMPANIES AT JOBSITE.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS. DO NOT SCALE FROM ELECTRICAL DRAWINGS. VERIFY EXACT LOCATION FOR TRANSFORMER PAD AND TRAFFIC BARRIERS WITH ARCHITECT.
3. CONTRACTOR SHALL INSTALL A #14 AWG OR 3/16" POLYPROPYLENE PULL LINE IN ALL EMPTY CONDUITS.
4. PROVIDE A WEATHERPROOF CAP ON ALL ENDS OF CONDUITS TERMINATED OUTSIDE OF A BUILDING. STAKE AND RECORD ALL CONDUIT LOCATIONS. PLACE AN ELECTRONIC MARKER FOR ALL STUB OUTS.

## MECHANICAL GENERAL NOTES

1. REFER TO MECHANICAL DRAWINGS FOR EXACT HVAC EQUIPMENT LOCATIONS AND SPECIFICATIONS. VERIFY EQUIPMENT WIRE SIZE, CONDUIT SIZES, CIRCUIT BREAKER AND RECONNECT SIZES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN OF ELECTRICAL.
2. PROVIDE CONTROL CONDUIT FROM EACH UNIT TO THERMOSTAT LOCATIONS. SEE MECHANICAL DRAWINGS FOR THERMOSTAT LOCATIONS.
3. ALL CONNECTIONS TO HVAC EQUIPMENT SHALL BE MADE WITH COPPER CONDUCTORS ONLY. SIZE CONDUCTORS PER UNIT NAMEPLATE SPECIFICATIONS. VERIFY PRIOR TO INSTALLATION OF CONDUCTORS.
4. ALL DISCONNECT SWITCHES SHALL BE FUSIBLE NEMA 3R, SIZE AS REQUIRED. ALL HVAC UNITS SHALL BE FUSED PER EQUIPMENT NAMEPLATE SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL VERIFY DISCONNECT AND FUSE SIZING WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING MATERIALS.
5. ALL FUSES FOR THIS PROJECT SHALL BE BUSSMAN CLASS RK5 DUAL ELEMENT CURRENT LIMITING WITH AMPERAGES AS INDICATED OR REQUIRED.
6. REFER TO MECHANICAL DRAWINGS FOR CONTROL WIRING. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND PENETRATIONS FOR CONTROL WIRING AS REQUIRED. COORDINATE WITH MECHANICAL CONTRACTOR AT JOBSITE.
7. FIRE SEAL ALL FIRE WALL PENETRATIONS FOR CONDUITS WITH AN APPROVED FIRE SEALANT AFTER CONDUIT INSTALLATION. FIRE SEAL SHALL PROVIDE EQUAL FIRE RATING AS WALL.

## FEEDER CALCULATIONS

|                                      |          |
|--------------------------------------|----------|
| PANEL "C2"                           |          |
| LIGHTING (CONNECTED)                 | 3,324 W  |
| RECEPTACLES - 50 & 150W EACH         | 9,000 W  |
| SMALL APPLIANCE RECEPTS              | 3,000 W  |
| COPPER                               | 1,500 W  |
| DISPOSAL                             | 1,200 W  |
| DISHWASHER                           | 1,200 W  |
| CEILING EXHAUST FAN "CEF-1"          | 207 W    |
| CEILING EXHAUST FAN "CEF-2"          | 156 W    |
| RANGE HOOD                           | 289 W    |
| DRINKING FOUNTAIN                    | 699 W    |
| EXERCISE EQUIPMENT - 6 @ 1,000W EACH | 6,000 W  |
| "FACE & LCC" PANELS                  | 400W     |
| SUBTOTAL                             | 27,415 W |
| 25% CONTINUOUS LOADS                 | 831 W    |
| 25% LARGEST MOTOR                    | 414 W    |
| TOTAL                                | 28,869 W |

FOR 120/240V-10-3W  
28,869 W + 240V = 119.4 AMPS.  
PROVIDE A 125A FEEDER.

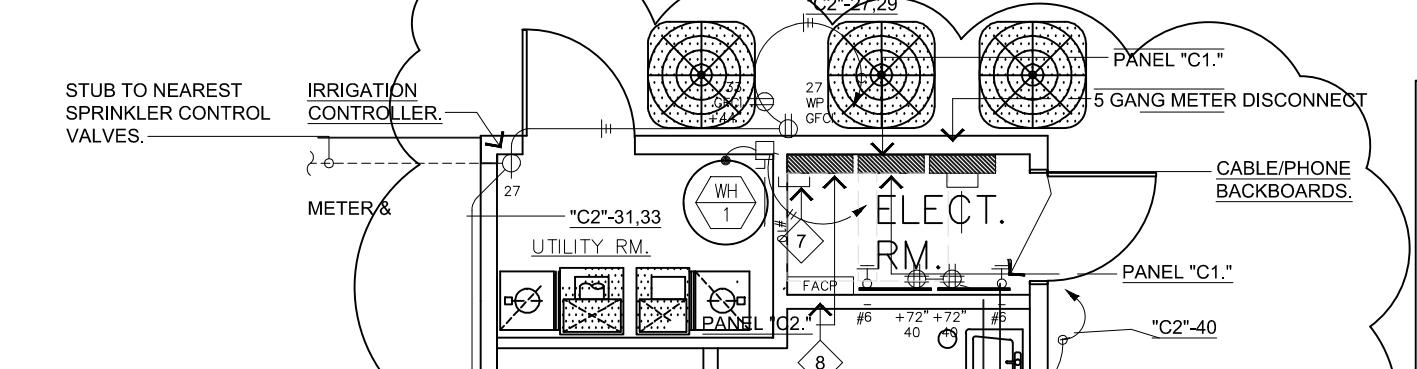
|                         |          |
|-------------------------|----------|
| PANEL "C3, C4, C5"      |          |
| LIGHTING (CONNECTED)    | 3,600 W  |
| SMALL APPLIANCE RECEPTS | 3,000 W  |
| COPPER                  | 1,656 W  |
| DISPOSAL                | 1,200 W  |
| DISHWASHER              | 2,000 W  |
| RANGE                   | 12,000 W |
| AC                      | 4,800 W  |
| DRYER                   | 288 W    |
| DISPOSAL                | 331 W    |
| 25% CONTINUOUS LOADS    | 831 W    |
| 25% LARGEST MOTOR       | 414 W    |
| TOTAL                   | 35,189 W |

FOR 120/240V-10-3W  
35,189 W + 240V = 146.62 AMPS.  
PROVIDE A 150A FEEDER.

## UTILITY ROOM MECHANICAL POWER PLAN

SCALE: 1/4" = 1'-0"

0 1 2 4



Maintain clearance at equipment in accordance with California Electrical Code, 2010 edition. Submit equipment dimensions to architect prior to foundation pour for verification of equipment clearances required.

| ■ NEW <input type="checkbox"/> EXISTING |       | PANEL "C4"                      |    |    |    |    |    |    |    |    |    | AIC: 10K (VERIFY)      |          |
|-----------------------------------------|-------|---------------------------------|----|----|----|----|----|----|----|----|----|------------------------|----------|
| VOLTAGE: 120/240V-10-3W                 |       | MOUNTING SURFACE / BOLT-ON      |    |    |    |    |    |    |    |    |    | LOCATION: UTILITY ROOM |          |
| BUS:                                    |       | 200A MOUNTING SURFACE / BOLT-ON |    |    |    |    |    |    |    |    |    | LOAD DESCRIPTION       |          |
| VOLT-AMPERES                            | CB    | CB                              | CB | CB | CB | CB | CB | CB | CB | CB | CB | VOLT-AMPERES           | CB       |
| 1 SMALL APPLIANCE 1                     | 1,500 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 1,200                  | LIGHTING |
| 3 SMALL APPLIANCE 2                     | 1,500 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 1,200                  | LIGHTING |
| 5 KITCHEN HOOD                          | 288   | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 1,200                  | LIGHTING |
| 7 DISPOSAL                              | 1,656 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 2,400                  | AC       |
| 9 DISHWASHER (SPACE FOR)                | 1,200 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 1,800                  | WASHER   |
| 11 RANGE                                | 6,000 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 6,000                  | SPARE    |
| 13 DRYER                                | 2,500 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 2,500                  | SPARE    |
| 15 FAN COIL "FC-1"                      | 2,184 | 25                              | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 2,250                  | SPARE    |
| 17 FAN COIL "FC-2"                      | 588   |                                 |    |    |    |    |    |    |    |    |    |                        |          |

# Fixture Schedule

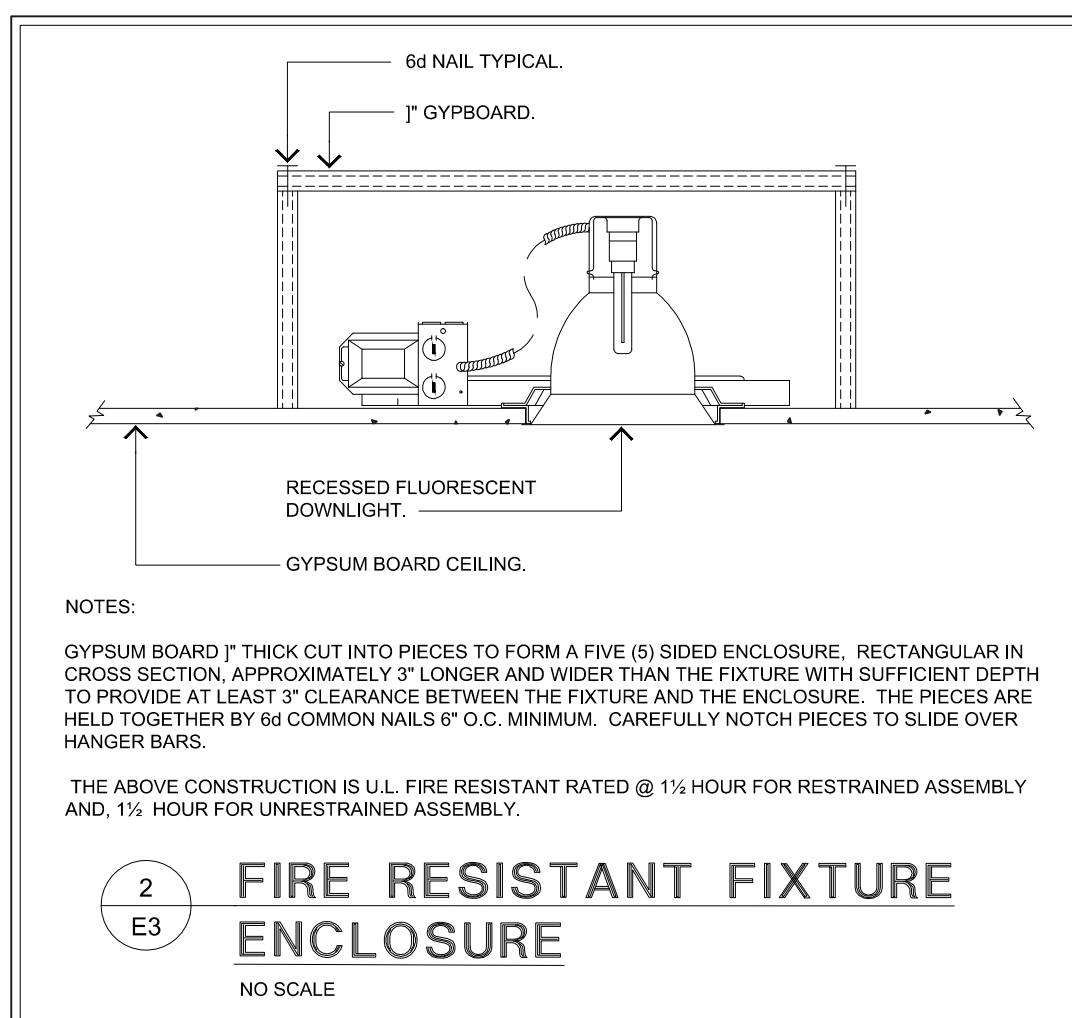
# Fixture Schedule

| Tag | Description                                                                         | Manufacturer                                              | Volts | Lamps           | VA | Mounting  | Remarks                                                  |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------------|-------|-----------------|----|-----------|----------------------------------------------------------|
| RA  | 2 FT. x 4 FT. SURFACE MOUNTED PARABOLIC w/ LOW IRIDESCENT SEMI-SPECULAR LOUVER      | LITHONIA<br># 2PM3X-232-12-LD-120-GEB                     | 120   | (2) 32W T8 35K  | 58 | SURFACE   |                                                          |
| RB  | 2 FT. x 4 FT. SURFACE MOUNTED PARABOLIC w/ LOW IRIDESCENT SEMI-SPECULAR LOUVER      | LITHONIA<br># 2PM3X-332-18-LD-120-1/1 & 1/2 GEB           | 120   | (3) 32W T8 35K  | 94 | SURFACE   |                                                          |
| RC  | 6" DIA. RECESSED FLUORESCENT HORIZ. LAMP DOWNLIGHT WITH SPECULAR DIFFUSE TRIM       | LITHONIA<br># LF6N-126TRT-F601AZ-120                      | 120   | (1) 26W TRT 35K | 28 | RECESSED  |                                                          |
| RD  | 8" DIA. RECESSED FLUORESCENT VERTICAL LAMP DOWNLIGHT w/ SPECULAR DIFFUSE TRIM       | LITHONIA<br># AFV-42TRT-120                               | 120   | (1) 42W TRT 35K | 42 | RECESSED  |                                                          |
| RDE | 8" DIA. RECESSED FLUORESCENT VERTICAL LAMP DOWNLIGHT w/ SPEC DIFF & BATTERY BACK UP | LITHONIA<br># AFV-42TRT-120-EL                            | 120   | (1) 42W TRT 35K | 42 | RECESSED  | PROVIDE UN-SWITCHED SENSING CIRCUIT PER NEC REQUIREMENTS |
| RJ  | 4 FT. SURFACE MTD. SINGLE LAMP FLUORESCENT WRAPAROUND w/ ACRYLIC DIFFUSER           | LITHONIA<br># CB-132-120-GEB                              | 120   | (2) 32W T8 35K  | 58 | SURFACE   |                                                          |
| RK  | 4 FT. SURFACE MTD. 2-LAMP FLUORESCENT WRAPAROUND w/ ACRYLIC DIFFUSER                | LITHONIA<br># LB-232-120-GEB                              | 120   | (2) 32W T8 35K  | 58 | SURFACE   |                                                          |
| RL  | 13" x 7" x 3"D, WALL MOUNTED FLUORESCENT WALL SCONCE POLYCARBONITE LENS             | KENALL ROUGH HOUSE<br># RHL712D-PP-MB-26Q-1-120           | 120   | (1) 26W QUAD    | 26 | SURFACE   |                                                          |
| RM  | 14" EXTERIOR SURFACE MOUNTED FLUORESCENT WALL WASHER (DARK-SKY)                     | TERON<br># TALON W SQR-F126QE-120E-MB-DL                  | 120   | (1) 26W QE      | 28 | SURFACE   |                                                          |
| RN  | 17" DIA. SURFACE MOUNTED FLUORESCENT ROUND WITH POLYCARBONITE LENS                  | KENALL MILLENNIUM EDGE<br># MR17FFL-PP-MB-18Q-2-120-SA    | 120   | (2) 18W QUAD    | 36 | SURFACE   |                                                          |
| RNE | 17" DIA. SURFACE MOUNTED FLUORESCENT ROUND WITH POLY LENS & EM BATT. BACK-UP        | KENALL MILLENNIUM EDGE<br># MR17FFL-PP-MB-18Q-2-120-SA-EL | 120   | (2) 18W QUAD    | 36 | SURFACE   | PROVIDE UN-SWITCHED SENSING CIRCUIT PER NEC REQUIREMENTS |
| RP  | 10" EXTERIOR SURFACE MTD. FLUORESCENT ADDRESS SIGN                                  | TERON<br># LITTLET-LR113-120-35K                          | 120   | (1) 13W PL      | 15 | SURFACE   |                                                          |
| RZ  | 52" DIA FIVE BLADE CEILING FAN                                                      | SEAGULL<br># 1621 (NO LIGHT KIT)                          | 120   | NONE            | 40 | CEILING   | MUST BE ENERGY STAR RATED                                |
| RX  | LED EXIT SIGN WITH 90 MIN BATTERY BACK-UP                                           | LITHONIA<br># LQM-S-W-1-G-120                             | 120   | LED             | 5  | UNIVERSAL | PROVIDE UN-SWITCHED CIRCUIT PER NEC REQUIREMENTS         |
| RXE | COMBINATION LED EXIT SIGN AND EMERGENCY LIGHT WITH 90 MIN BATTERY BACK-UP           | LITHONIA<br># LHQM-S-W-1-G-120                            | 120   | LED             | 5  | UNIVERSAL | PROVIDE UN-SWITCHED CIRCUIT PER NEC REQUIREMENTS         |
| RY  | WET LOCATION EMERGENCY EGGS LIGHT WITH 90 MIN BATTERY BACK-UP                       | LITHONIA<br># AFN-B-EXT                                   | 120   | w/ FIXTURE      | 1  | WALL      | PROVIDE UN-SWITCHED CIRCUIT PER NEC REQUIREMENTS         |

NOTE: FIXTURES MUST COMPLY WITH CEC 314.27, WHEN APPLICABLE

# LIGHTING CONTROL SCHEDULE

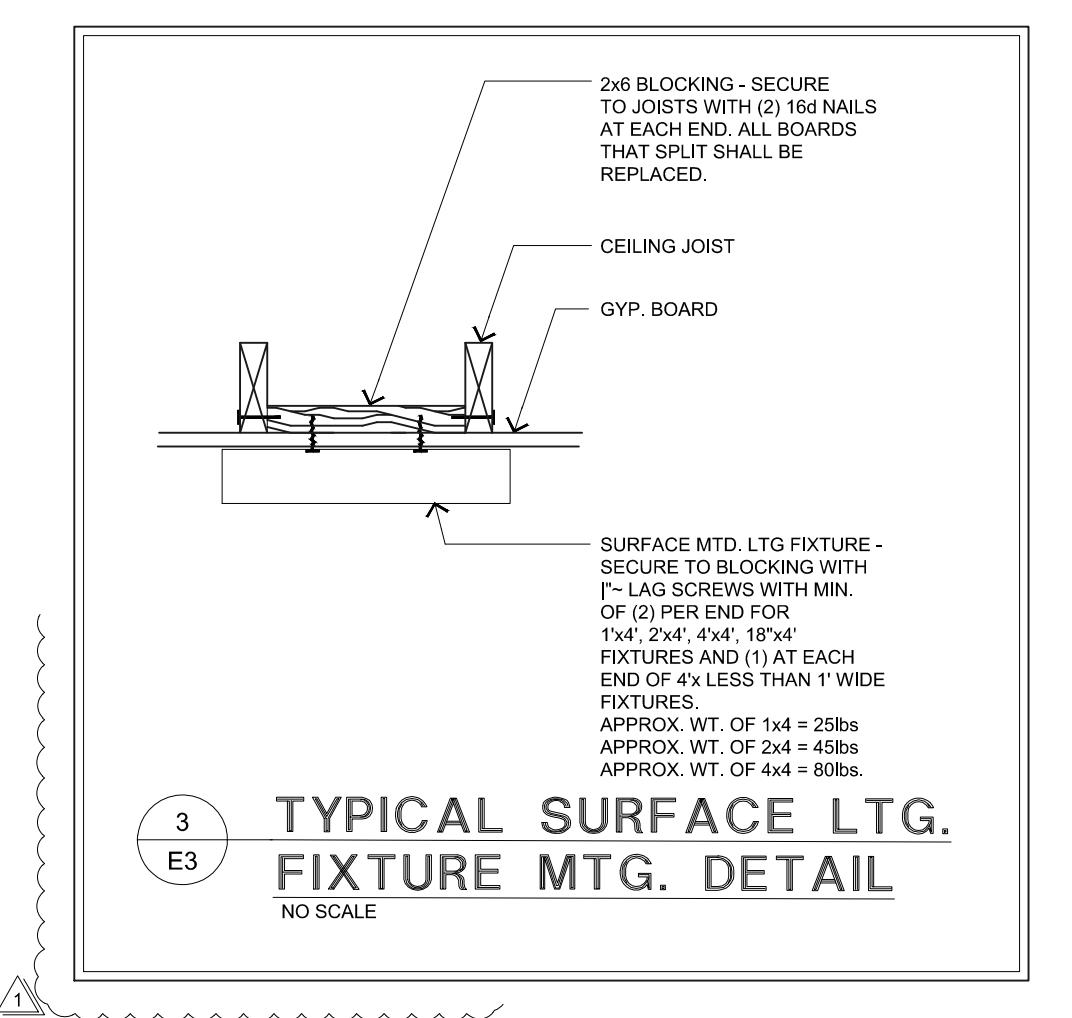
| TAG   | DESCRIPTION                                                                | MANUFACTURER               | OPERATION                                                            | REMARKS                                                                   |
|-------|----------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------|
| (OS1) | WALLBOX MOUNTED INFRARED. LINE VOLTAGE OCC. SENSOR w/ SINGLE TOGGLE SWITCH | SENSOR SWITCH # WSD-SA     | PROVIDES FOR MANUAL ON/AUTO OFF OF LIGHTING, 30 MIN MAXIMUM          | PROGRAM FOR 10 MINUTE MINIMUM OPERATION                                   |
| (OS4) | WALLBOX MOUNTED DUAL-TECH LINE VOLTAGE OCC. SENSOR w/ DUAL TOGGLE SWITCH   | SENSOR SWITCH # WSD-PDT-2P | PROVIDES FOR MANUAL ON/AUTO OFF OF BI-LEVEL LIGHTING, 30 MIN MAXIMUM | PROGRAM LIGHT FOR 10 MIN. MINIMUM. PROGRAM FAN FOR ADDITIONAL 10 MINUTES. |
| (OS5) | CEILING MOUNTED DUAL-TECH LINE VOLTAGE EXTENDED RANGE OCCUPANCY SENSOR     | SENSOR SWITCH # CMR-PDT-10 | PROVIDES FOR AUTO ON/AUTO OFF OF LIGHTING, 30 MIN MAXIMUM            |                                                                           |
| (OS6) | WALL MOUNTED INFRARED LINE VOLTAGE EXTENDED RANGE OCCUPANCY SENSOR         | SENSOR SWITCH # WVR-16     | PROVIDES FOR AUTO ON/AUTO OFF OF LIGHTING, 30 MIN MAXIMUM            |                                                                           |
| (OS7) | LIGHTING CONTROL PANEL                                                     | LC&D (BLUE-BOX) # LT-4     | PROVIDES FOR AUTO ON/AUTO OFF OF EXTERIOR LIGHTING                   | PROVIDE PER T-24 REQ'MTS. PROVIDE ALL REQUIRED PROGRAMMING                |



# **FIRE RESISTANT FIXTURE ENCLOSURE**

---

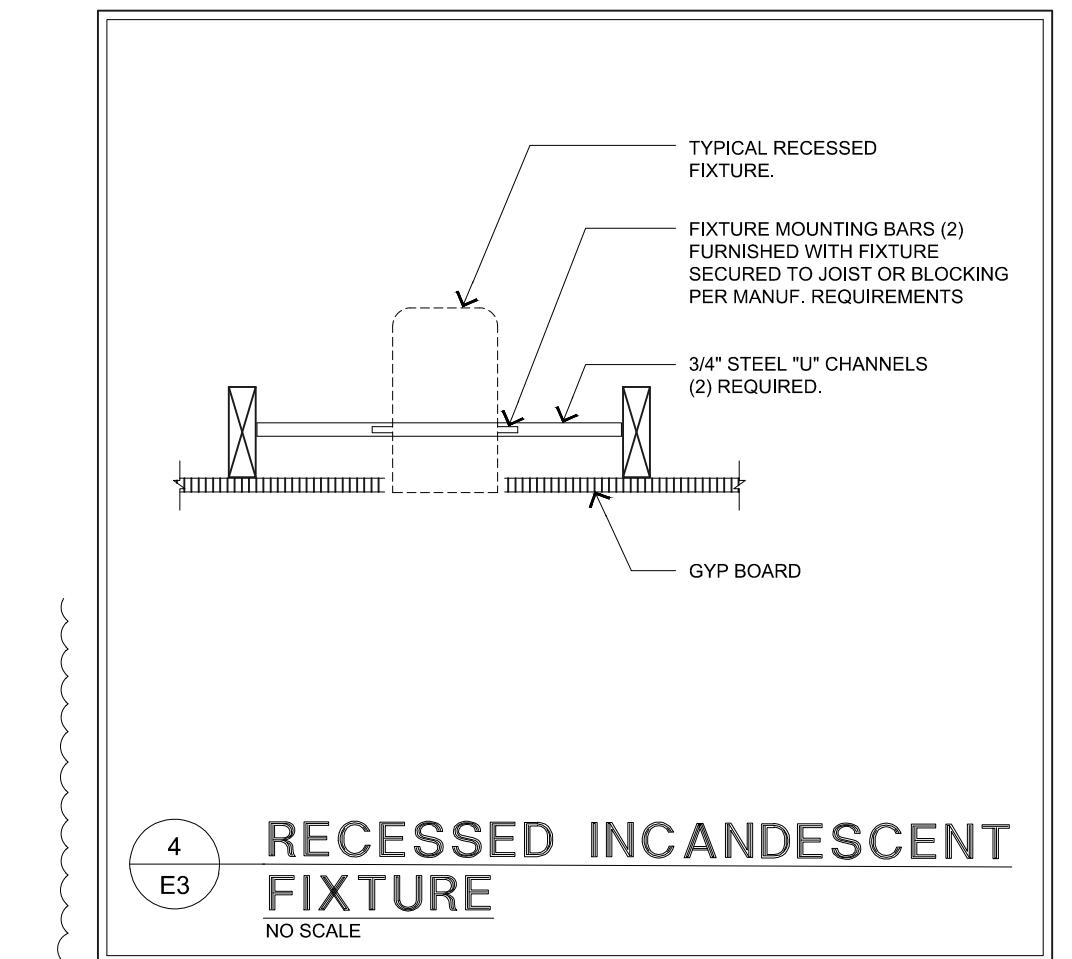
NO SO



SURFACE MTD. LTG FIXTURE -  
SECURE TO BLOCKING WITH  
1"~ LAG SCREWS WITH MIN.  
OF (2) PER END FOR  
1'x4', 2'x4', 4'x4', 18"x4'  
FIXTURES AND (1) AT EACH  
END OF 4'x LESS THAN 1' WIDE  
FIXTURES.  
APPROX. WT. OF 1x4 = 25lbs

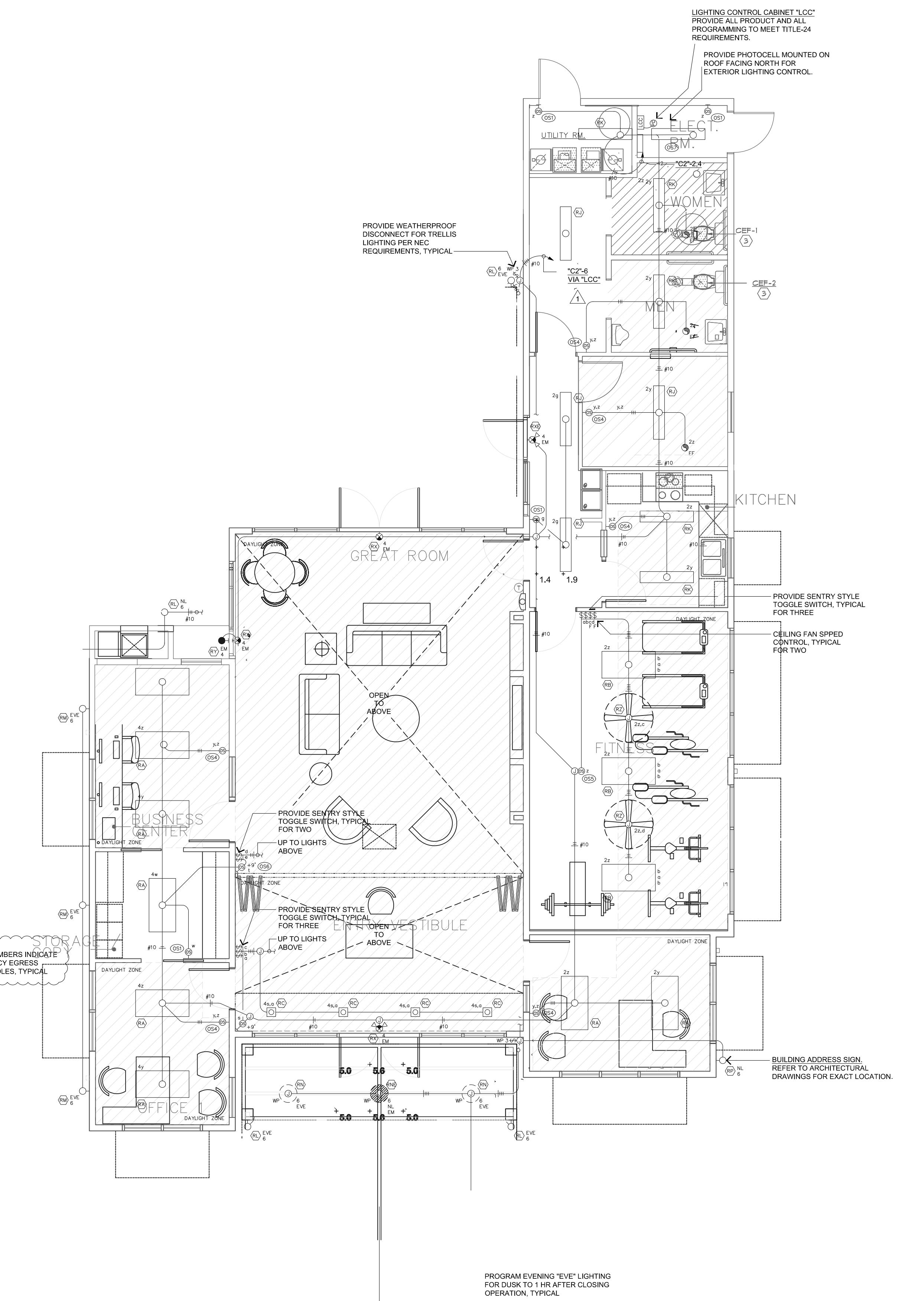
APPROX. WT. OF 4x4 = 80lbs.

1  
N

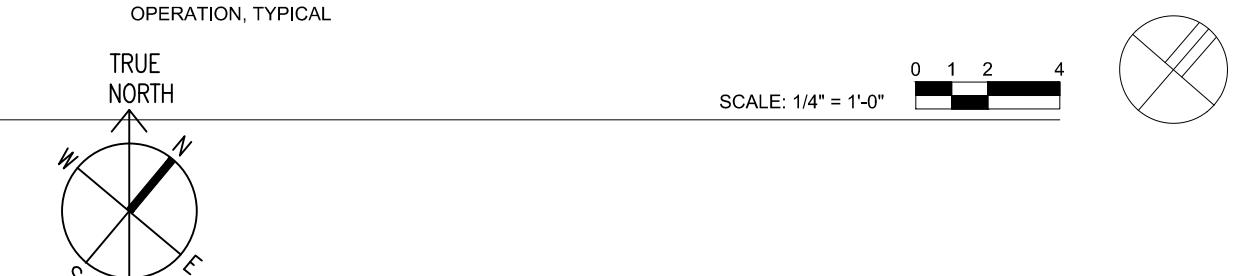


# RECESSED INCANDESCENT FIXTURE

NO SCALE



## COMMUNITY CENTER LIGHTING PLAN



# COMMUNITY CENTER GOUND FLOOR LIGHTING PLAN

SCALE: 3/16" = 1'-0"

CALE: 3/16" = 1'-0"

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| REVISIONS                                                                            | BY |
|  |    |

REVISIONS

BY

LICENSED ARCHITECT  
JOSEPH OAKLEY JR.  
No. 15457  
★  
REN. 9-30-11  
STATE OF CALIFORNIA  
★

PROJECT TITLE: **COMMUNITY CENTER  
HARBOR PARK APARTMENTS  
969 PORTER STREET, VALLEJO, CA 94560**

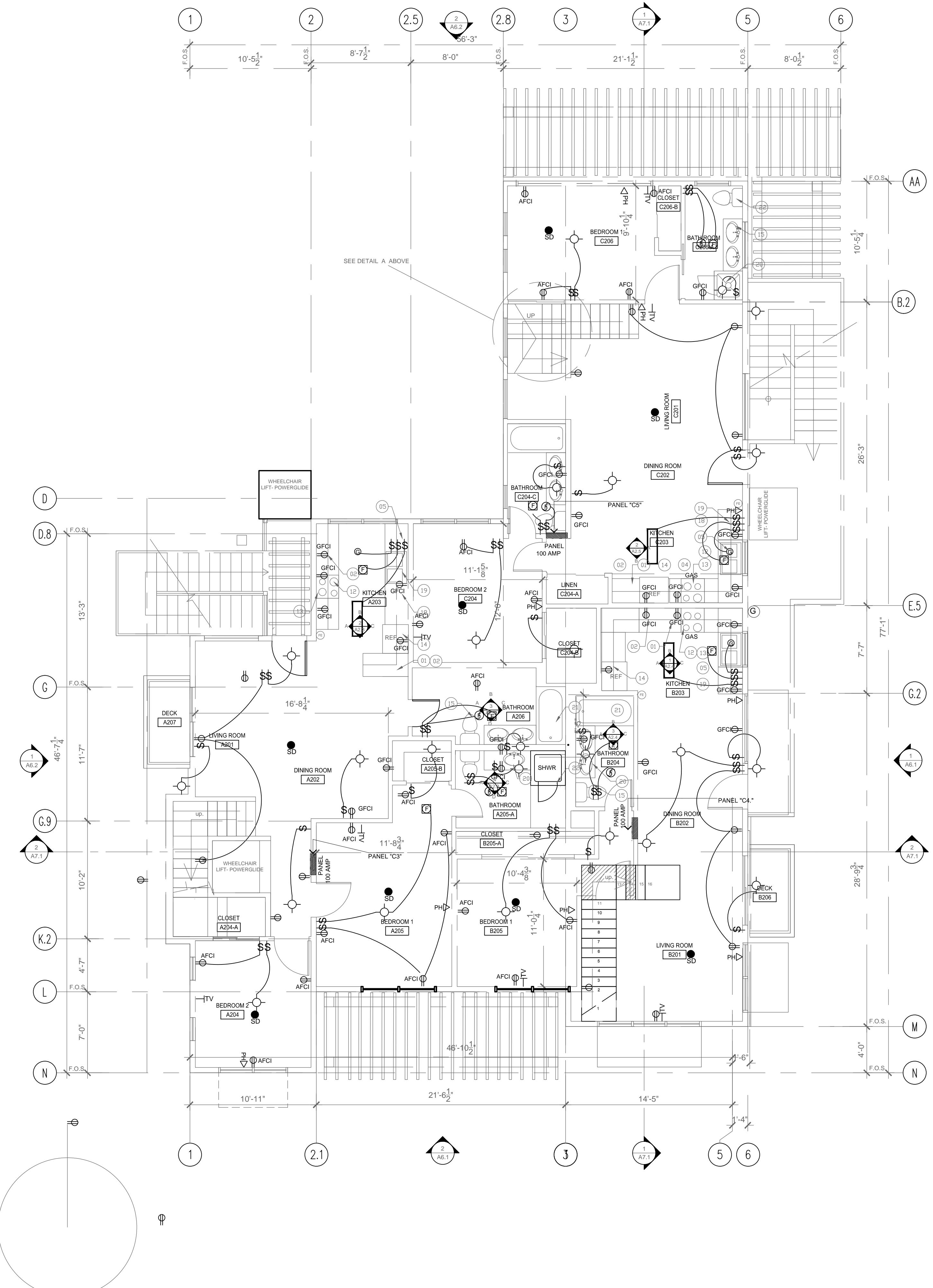
DRAWING TITLE: **OAKLEY & OAKLEY**

---

ARCHITECT, CIVIL & STRUCTURAL ENGINEERS  
7700 EDGEWATER DRIVE, STE. 615  
OAKLAND, CA 94621  
510.562.6028  
FAX 510.562.6043



Date: 08/30/2011  
Scale: AS NOTED  
Drawn: STAFF  
Checked: RY  
Job No.: 2011-09  
Sheet: E02  
Of \_\_\_\_\_ Sheets \_\_\_\_\_



**01 COMMUNITY CENTER SECOND FLOOR PLAN**

---

SCALE: 3/16" = 1'-0"

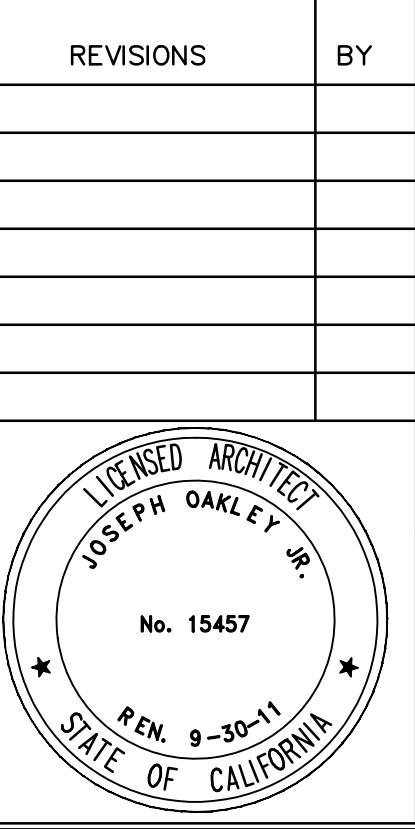
## ELECTRICAL LEGEND

## ELECTRICAL NOTES:

1. ALL OUTLETS SERVING KITCHEN COUNTERTOPS TO HAVE GFCI PROTECTION. CEC 210-8(a)-3.
2. PROVIDE 2 SEPARATE 20 AMP CIRCUITS FOR KITCHEN SMALL APPLIANCES, WITH NO OTHER OUTLETS ON THE CIRCUITS. CEC 220-4(b), 210-52(b).
3. PROVIDE AT LEAST ONE 20 AMP CIRCUIT FOR BATHROOM OUTLETS, WITH NO OTHER OUTLETS ON THE CIRCUITS. CEC 210-52(d).
4. PRIMARY LIGHTING FOR KITCHEN AND BATHROOMS SHALL BE FLUORESCENT.
5. CLOTHES CLOSET LAMPS SHALL BE ENCLOSED IF INCANDESCENT TYPE. LIGHT FIXTURE CLEARANCES SHALL CONFORM TO CEC 410-8.
6. ALL EXTERIOR LIGHTS TO BE WEATHERPROOF.  

7. OUTLETS ALONG WALL TO BE MAX 12 FT ON CENTER INCLUDING WALL SPACES 2' WIDE OR MORE (NO POINT ALONG THE WALL SHALL BE MORE THAN 6 FT FROM AN OUTLET).
9. EXHAUST FANS AT BATHROOM SHALL COMPLY WITH

|                          |                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------|
|                          | SUPPLY AIR DUCT                                                                         |
|                          | RETURN AIR DUCT                                                                         |
|                          | F.D.                                                                                    |
|                          | FIRE DAMPER                                                                             |
|                          | SUPPLY AIR DIFFUSER                                                                     |
|                          | RETURN AIR DIFFUSER                                                                     |
|                          | AIR REGISTER IN FLOOR                                                                   |
|                          | AIR REGISTER IN TOE SPACE                                                               |
|                          | AIR REGISTER IN CEILING                                                                 |
|                          | V                                                                                       |
|                          | (E) VENT                                                                                |
|                          | H.B.                                                                                    |
|                          | HOSE BIBB                                                                               |
|                          | G                                                                                       |
|                          | GAS                                                                                     |
| <b><u>ELECTRICAL</u></b> |                                                                                         |
|                          | HARD WIRED INTERCONNECTED SM. DETECTOR WITH BATTERY BACK UP                             |
|                          | RECESSED CAN LIGHT FIXTURE                                                              |
|                          | 26 WATT FLUORESCENT FIXTURE, W. 1175BN SATURN CEILING FIXTURE B                         |
|                          | CEILING FIXTURE                                                                         |
|                          | WALL MOUNTED LIGHT FIXTURE                                                              |
|                          | WALL MOUNTED FLOOD LIGHTS                                                               |
|                          | MINI-FLUORESCENT FIXTURE MOUNTED UNDER CABINET (I.E. IN KITCHEN)                        |
|                          | FLUOR. FIXTURE IN LIGHTS SOFFIT WITH DIFFUSER (I.E. IN BATHROOMS)                       |
|                          | SURFACE MOUNTED FLUOR. FIXTURE WITH ENCLOSED DIFFUSER AT LAUNDRY EXPOSED TUBE IN GARAGE |
|                          | DUPLEX RECEPTACLE +12" TYP.                                                             |
|                          | SWITCH W/ DIMMER +54 TYP.                                                               |
|                          | SWITCH +54 TYP.                                                                         |
|                          | TELEPHONE RECEPTACLE +48" TYP.                                                          |
|                          | TELEVISION RECEPTACLE +12" TYP.                                                         |
|                          | FAX JACK +48" TYP., U.O.M.                                                              |
|                          | 220 V RECEPTACLE +12" TYP.                                                              |
|                          | INTERCOM                                                                                |
|                          | DOOR BELL                                                                               |
|                          | ELECTRICAL PANEL BD.                                                                    |
|                          | SCONCE                                                                                  |
|                          | 3-WAY OUTLET +12" TYP.,                                                                 |
|                          | EPB                                                                                     |
|                          | ELECTRICAL PANEL BOARD                                                                  |
|                          | GARBAGE DISPOSER                                                                        |
|                          | AFCI                                                                                    |
|                          | ALL 125 AMP CIRCUITS SHALL BE PROTECTED INCLUDING ALL OUTLETS                           |



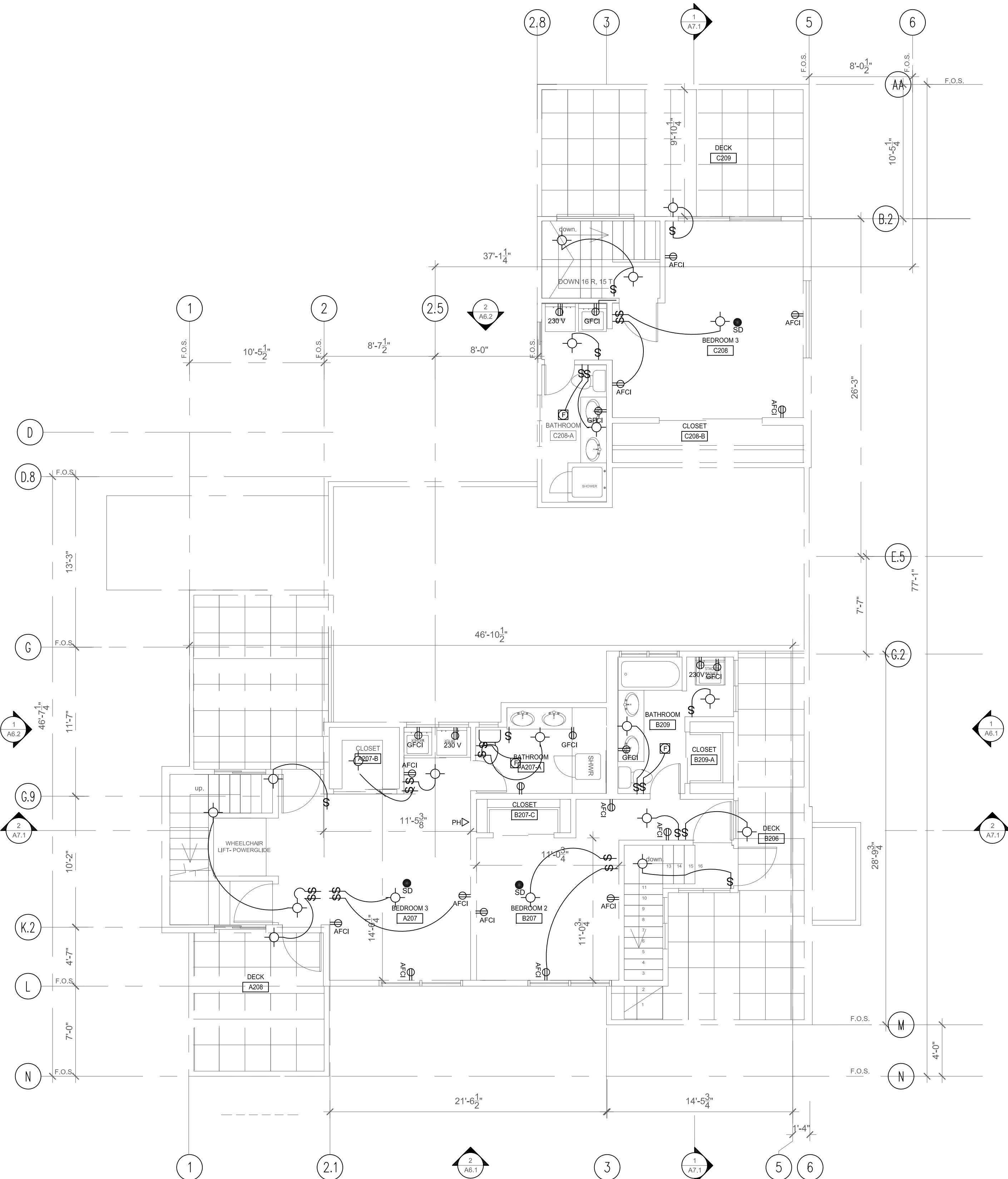
**A K L E Y & O A K L E Y**  
ARCHITECT, CIVIL & STRUCTURAL ENGINEERS  
700 EDGEWATER DRIVE, STE. 615  
AKLAND, CA 94621  
10.562.6028  
510.562.6043  
AX

PROJECT TITLE: **COMMUNITY CENTER  
HARBOR PARK APARTMENTS  
969 PORTER STREET, VALLEJO, CA 94560**

DRAWING TITLE:

Date: 08/30/2011  
Scale: AS NOTED  
Drawn: STAFF  
Checked: RY  
Job No.: 2011-09

# E0.3



## ELECTRICAL LEGEND

## ELECTRICAL NOTES:

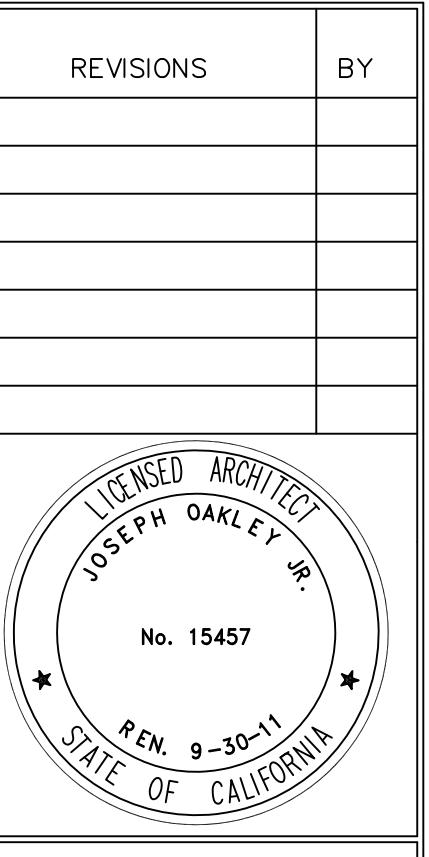
- ALL OUTLETS SERVING KITCHEN COUNTERTOPS TO HAVE GFCI PROTECTION. CEC 210-8(a)-3.
- PROVIDE 2 SEPARATE 20 AMP CIRCUITS FOR KITCHEN SMALL APPLIANCES, WITH NO OTHER OUTLETS ON THE CIRCUITS. CEC 220-4(b), 210-52(b).
- PROVIDE AT LEAST ONE 20 AMP CIRCUIT FOR BATHROOM OUTLETS, WITH NO OTHER OUTLETS ON THE CIRCUITS. CEC 210-52(d).
- PRIMARY LIGHTING FOR KITCHEN AND BATHROOMS SHALL BE FLUORESCENT.
- CLOTHES CLOSET LAMPS SHALL BE ENCLOSED IF INCANDESCENT TYPE. LIGHT FIXTURE CLEARANCES SHALL CONFORM TO CEC 410-8.
- ALL EXTERIOR LIGHTS TO BE WEATHERPROOF.
- OUTLETS ALONG WALL TO BE MAX 12 FT ON CENTER INCLUDING WALL SPACES 2' WIDE OR MORE (NO POINT ALONG THE WALL SHALL BE MORE THAN 6 FT FROM AN OUTLET).
- EXHAUST FANS AT BATHROOM SHALL COMPLY WITH CBC 1203.3.

|     |                           |
|-----|---------------------------|
| —   | SUPPLY AIR DUCT           |
| —   | RETURN AIR DUCT           |
| ■   | F.D.                      |
| □   | SUPPLY AIR DIFFUSER       |
| □   | RETURN AIR DIFFUSER       |
| ■■■ | AIR REGISTER IN FLOOR     |
| ■■■ | AIR REGISTER IN TOE SPACE |
| ■■■ | AIR REGISTER IN CEILING   |
| V   | (E) VENT                  |
| —   | H.B.                      |
| —   | G                         |

## ELECTRICAL

|     |                                                                                                                 |
|-----|-----------------------------------------------------------------------------------------------------------------|
| ●   | HARD WIRED INTERCONNECTED SMOKE DETECTOR WITH BATTERY BACK UP.                                                  |
| □   | RECESSED CAN LIGHT FIXTURE                                                                                      |
| □   | 26 WATT FLUORESCENT FIXTURE, WITH 13" DIA. MATTE WHITE LENS. 1175BN SATURN CEILING FIXTURE BY LITHONIA-13" DIA. |
| ○   | CEILING FIXTURE                                                                                                 |
| ○   | WALL MOUNTED LIGHT FIXTURE                                                                                      |
| ○   | WALL MOUNTED FLOOD LIGHTS                                                                                       |
| □   | MINI-FLUORESCENT FIXTURE MOUNTED UNDER CABINET (I.E. IN KITCHEN)                                                |
| □   | FLUOR. FIXTURE IN LIGHTS SOFFIT WITH DIFFUSER (I.E. IN BATHROOMS)                                               |
| □   | SURFACE MOUNTED FLUOR. FIXTURE W/ ENCLOSED DIFFUSER AT LAUNDRY & EXPOSED TUBE IN GARAGE                         |
| ○   | DUPLEX RECEPTACLE +12" TYP.                                                                                     |
| ○   | SWITCH W/ DIMMER +54 TYP.                                                                                       |
| ○   | SWITCH +54 TYP.                                                                                                 |
| △   | TELEPHONE RECEPTACLE +48" TYP.                                                                                  |
| △   | TELEVISION RECEPTACLE +12" TYP.                                                                                 |
| △   | FAX JACK +48" TYP., U.O.N.                                                                                      |
| ○   | 220 V RECEPTACLE +12" TYP.                                                                                      |
| ○   | INTERCOM                                                                                                        |
| ○   | DOOR BELL                                                                                                       |
| —   | ELECTRICAL PANEL BD.                                                                                            |
| ○   | SCONCE                                                                                                          |
| ○   | 3-WAY OUTLET +12" TYP., U.O.N.                                                                                  |
| EPB | ELECTRICAL PANEL BOARD                                                                                          |
| ○   | GARBAGE DISPOSER                                                                                                |
| ○   | ALL 125 AMP CIRCUITS SHALL BE ARC-FAULT INTERRUPTER PROTECTED INCLUDING ALL OUTLETS & SWITCHES                  |

AFCI

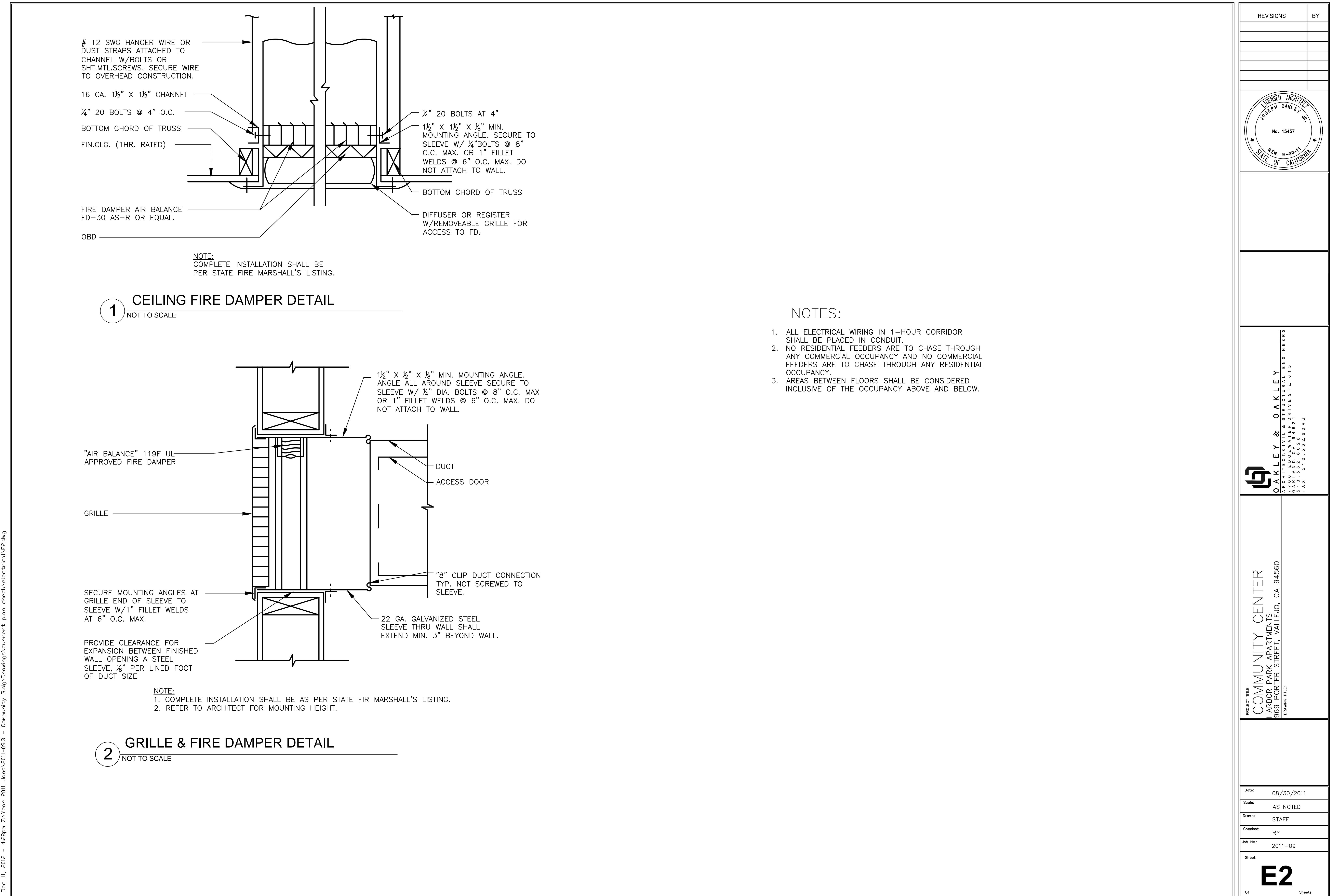


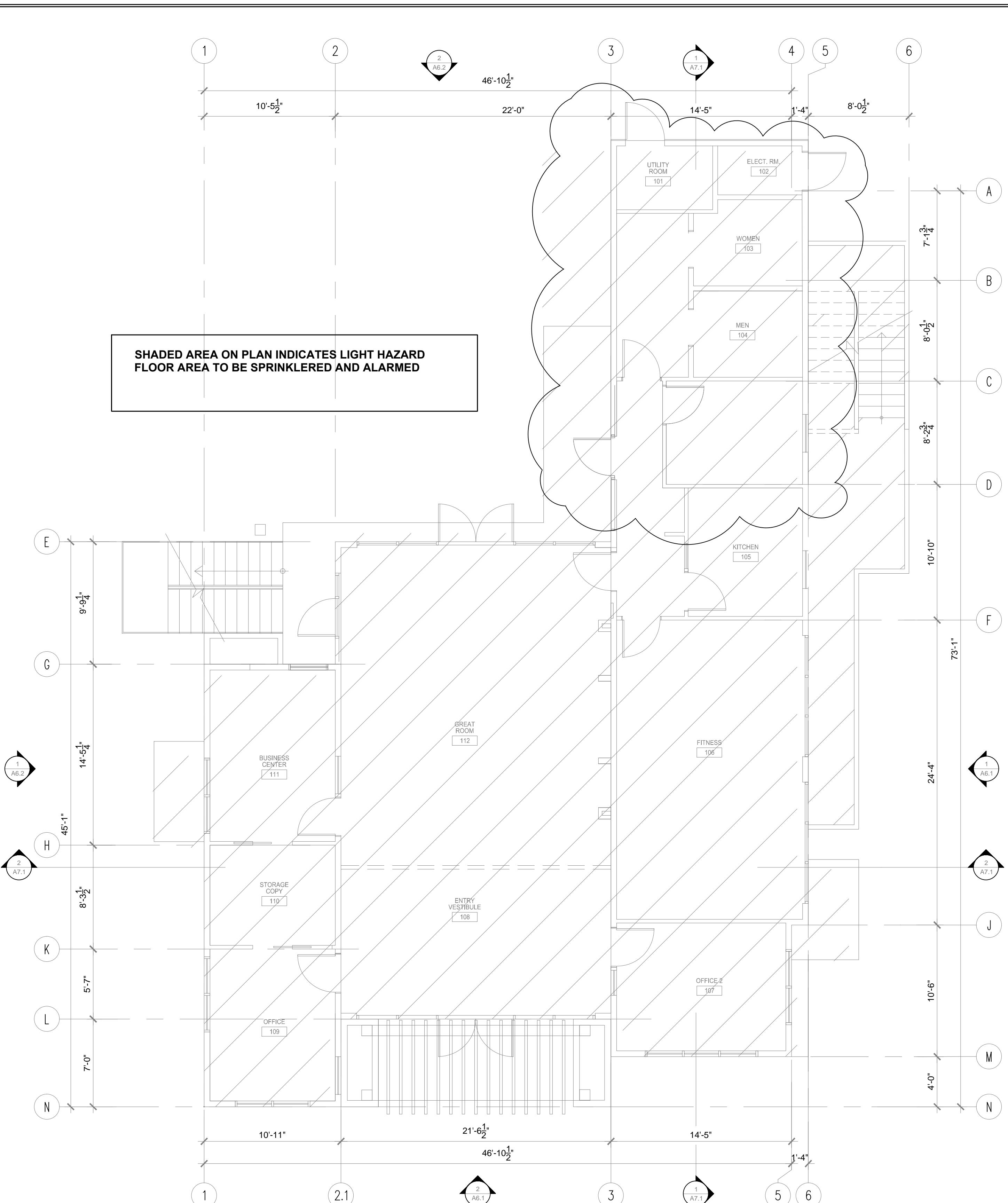
OAKLEY & OAKLEY  
ARCHITECTS CIVIL & STRUCTURAL ENGINEERS  
770 EDEWATER DRIVE, STE. 615  
OAKLAND, CA 94621  
500 561 6200 562 6043  
FAX 510 562 6043

PROJECT TITLE:  
COMMUNITY CENTER  
HARBOR PARK APARTMENTS  
969 PORTER STREET, VALLEJO, CA 94560  
DRAWING TITLE:

Date: 08/30/2011  
Scale: AS NOTED  
Drawn: STAFF  
Checked: RY  
Job No.: 2011-09  
Sheet:

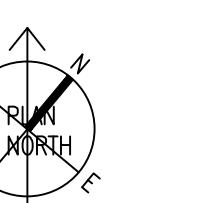
E0.4  
0f Sheets





# FIRE ALARM GENERAL NOTES

1. EXAMINE ALL DRAWINGS AND FIELD VERIFY (E) ELECTRICAL CONDITIONS INCLUDING VOLTAGES, EXISTING CIRCUITS AND EXACT ROUTING OF ALL CONDUITS AND CONDITIONS IN AND AROUND CONDUIT RUNS.
2. COORDINATE ALL WORK SO THAT INTERFERENCE BETWEEN ALL TRADES WILL BE AVOIDED.
3. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 AND 24 AS APPLICABLE TO THIS PROJECT AND THE FOLLOWING CODES AND STANDARDS:
  - CBC 2010; CFEC 2010; CFC 2010
  - STATE FIRE MARSHAL TITLE 19, PUBLIC SAFETY
  - NFPA 72, 2010 EDITION WITH CALIFORNIA AMENDMENTS
4. REPORT ANY DISCREPANCY TO ARCHITECT/ENGINEER PRIOR TO ANY WORK.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND PROVIDE REPAIR OF ADJACENT EXISTING SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF NEW WORK.
6. COORDINATE ALL WORK AND SHUTDOWNS WITH THE OUSD REPRESENTATIVE.
7. THE INSTALLATION OF THIS PROJECT SHALL BE MADE IN COMPLIANCE WITH THE LATEST AND APPLICABLE CODES AND STANDARDS.
8. ALL CONCEALED RACEWAY SHALL BE ELECTRICAL METALLIC TUBING (EMT). ALL EXPOSED RACEWAY SHALL BE GALVANIZED RIGID STEEL OR LIQUIDTIGHT FLEXIBLE CONDUIT, ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40, UNLESS OTHERWISE NOTED. PROVIDE PULL STRING IN ALL UNDERGROUND CONDUITS.
9. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND MOUNTING HEIGHTS PRIOR TO ELECTRICAL EQUIPMENT/DEVICE INSTALLATION.
10. VERIFY (E) CIRCUITING PRIOR TO ANY WORK. MAINTAIN POWER TO EXISTING BUILDINGS.
11. MAINTAIN EXISTING BUILDINGS SECURITY, FIRE ALARM & FIRE PROTECTION SYSTEMS AT ALL TIME.
12. ALL CONDUITS THROUGH FIRE RATED WALL AND FLOOR SHALL BE SEALED WITH CODE APPROVED FIRE STOP MATERIAL.
13. 120VAC IS NOT PERMITTED IN SAME CONDUIT WITH LOW VOLTAGE WIRING.
14. ANY SMOKE DETECTOR INSTALLED BEFORE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST. ANY PENALTIES OF THE DEVICE REPLACEMENT REQUIRED AS A RESULT OF FALSE ALARMS DUE TO DIRT-CONTAMINATED DETECTORS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
15. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15 dBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75dBA AT 10'-0" OR MORE THAN 110 dBA IN TOTAL THROUGHOUT.
16. AUDIBLE DEVICES SHALL SOUND THE EMERGENCY EVACUATION SIGNAL IN A "THREE PULSE TEMPORAL PATTERN" PER THE REQUIREMENTS OF CFC.
17. VISUAL DEVICES SHALL NOT EXCEED 2 FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN 1 FLASH EVERY SECOND.
18. ALL CIRCUITS SHALL BE SUPERVISED AGAINST OPENS, SHORTS AND GROUNDS.
19. BACKUP BATTERIES SHALL SUPPLY 24 HOURS OF STANDBY AND 5 MINUTES OF ALARM.
20. FIRE ALARM CIRCUITS SHALL BE IDENTIFIED AND MARKED IN ACCORDANCE WITH NEC SECTION 760.
21. ALL OUTSIDE FIRE ALARM DEVICES SHALL BE CSFM LISTED AS WEATHERPROOF TYPE.
22. ALL FIRE ALARM WIRING SHALL BE CONTINUOUS WITHOUT SPLICES AND TERMINATED AT TERMINALS IN THE DEVICE OR APPROVED TERMINAL BLOCKS IN TERMINAL CABINETS OR JUNCTION BOXES. SPLICES SHALL NOT BE PERMITTED IN UNDERGROUND PULL BOXES.
23. FIRE ALARM CONTRACTOR SHALL PROVIDE A COMPLETED AND SIGNED "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS.
24. AREA SMOKE DETECTORS SHALL BE INSTALLED PER NFPA 72 AND SHALL MAINTAIN A MINIMUM 3'-0" SEPARATION FROM ANY SOURCE OF AIR SUPPLY REGISTERS.
25. ALL NEW FIRE ALARM WIRING SHALL BE INSTALLED IN CONDUIT MINIMUM 3/4" I.D. FIELD VERIFY EXISTING CONDUIT ROUTING.
26. ALL NEW FA CIRCUITS ARE SHOWN ON PLANS ARE DIAGRAMMATICAL. EXACT CIRCUIT RACEWAYS AND CONDUIT ROUTING SHALL BE DETERMINED IN THE FIELD.
27. UPON COMPLETION OF SYSTEM INSTALLATION, THE SYSTEM SHALL BE TESTED IN THE PRESENCE OF AND IN A MANNER ACCEPTABLE TO THE INSPECTOR OF RECORD. THE CONTRACTOR SHALL SUPPLY NECESSARY TESTING EQUIPMENT INCLUDING A "SOUND LEVEL METER" TO CHECK ACCEPTABLE DECIBEL LEVELS OF AUDIBLE DEVICES.
28. THE "END OF LINE RESISTANCE" FOR EACH CIRCUIT SHALL BE TESTED IN THE PRESENCE OF THE INSPECTOR OF RECORD AND SHALL NOT EXCEED A MAXIMUM OF 10% OF THE 24 VOLT SYSTEM. EACH COMPONENT OF THE CIRCUIT SHALL NOT EXCEED THE LISTED MANUFACTURER'S MINIMUM OPERATING VOLTAGES.



| APPLICABLE CODES                                                               | TYPE OF FIRE ALARM SYSTEM                                                                      |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| CALIFORNIA BUILDING CODE 2010 EDITION                                          |                                                                                                |
| CALIFORNIA FIRE CODE 2010 EDITION                                              | THE FIRE ALARM SYSTEM IS ADDRESSABLE AND AUTOMATIC DETECTION. THE NEW BUILDING IS SPRINKLERED. |
| CALIFORNIA ELECTRIC CODE 2010 EDITION                                          | SIGNALING LINE CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS ARE POWER LIMITED.                 |
| CALIFORNIA MECHANICAL CODE 2010 EDITION                                        | SIGNALING LINE CIRCUITS ARE CLASS B/STYLE 4 PER NFPA 72.                                       |
| NFPA 72 2010 EDITION AS AMENDED IN CHAPTER 35 OF THE CALIFORNIA BUILDING CODE. | NOTIFICATION APPLIANCE CIRCUITS ARE CLASS B/ STYLE Y PER NFPA 72.                              |

# 01 COMMUNITY CENTER ALARM & SPRINKLER PLAN - GROUND FLOOR PLAN

SCALE: 1/4" = 1'-0"

Dec 12, 2012 - 4:44pm Z:\Year 2011\Jobs\2011-09.3 - Community Bldg\Drawings\Fire Sprinklers\FIRE-ALARM SRINKLER F:\S1\_082012.dwg

|                                                                                                                                                                                                                                                                                                                                                                               |  |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------|
| REVISIONS                                                                                                                                                                                                                                                                                                                                                                     |  | BY   |
| 9/26/2011 - PLAN CHECK                                                                                                                                                                                                                                                                                                                                                        |  | G.O. |
|                                                                                                                                                                                                                                                                                           |  |      |
|                                                                                                                                                                                                                                                                                          |  |      |
| <p>PROJECT TITLE: <b>COMMUNITY CENTER<br/>HARBOR PARK APARTMENTS<br/>969 PORTER STREET, VALLEJO, CA 94560</b></p> <p>DRAWING TITLE: <b>FIRST FLOOR PLAN</b></p> <p>DATE: <b>08/30/2011</b></p> <p>SCALE: <b>AS NOTED</b></p> <p>DRAWN: <b>STAFF</b></p> <p>CHECKED: <b>RY</b></p> <p>JOB NO.: <b>2011-09</b></p> <p>Sheet: <b>1</b> of <b>1</b> Sheets</p> <p><b>FAS1</b></p> |  |      |

COMMUNITY CENTER  
ARBOR PARK APARTMENTS  
669 PORTER STREET, VALLEJO, CA 94560

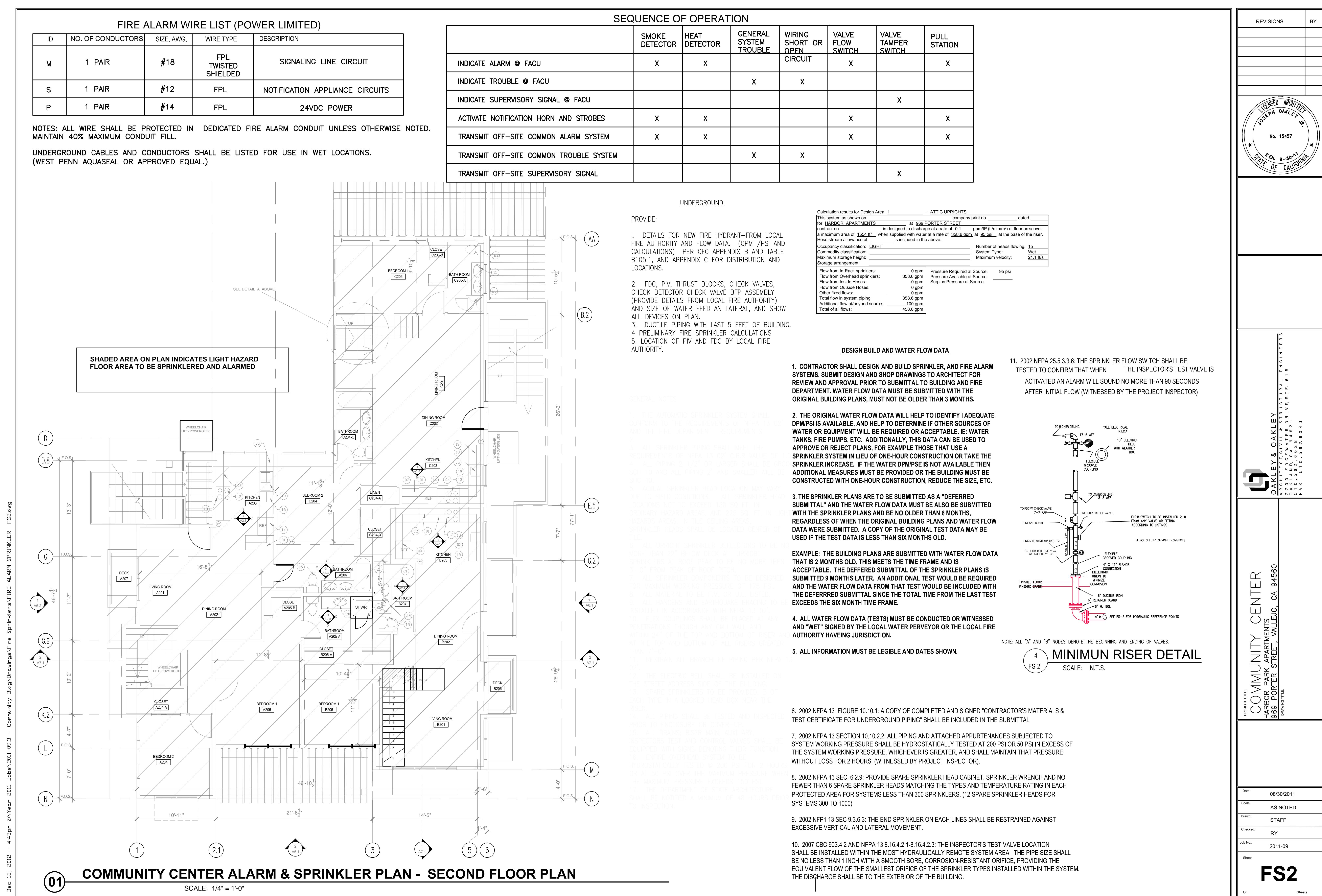
---

FIRST FLOOR PLAN

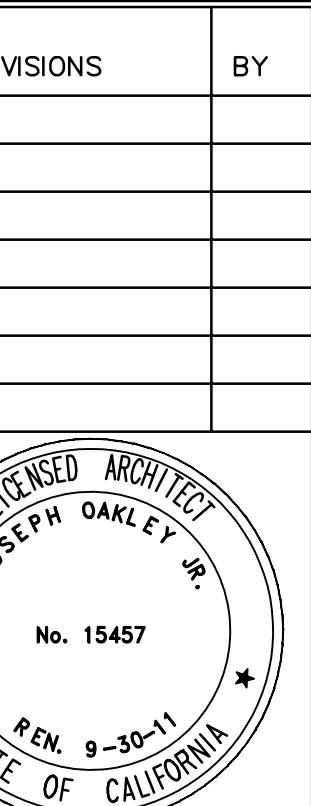
96

08/30/2011  
AS NOTED  
STAFF  
RY  
2011-09

# AS1







**OAKLEY & OAKLEY**  
ARCHITECT, CIVIL & STRUCTURAL ENGINEERS  
700 EDGEWATER DRIVE, STE. 615  
AKLAND, CA 94621  
10.562.6028  
AX 510.562.6043

**HARBOR PARK APARTMENTS**  
**969 PORTER STREET, VALLEJO, CA 94560**

10

08/30/2011  
AS NOTED  
STAFF  
RY  
2011-09

# 24.1

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125°*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1          | 2             | 3    | 4                         | 5                    | 6                 | 7                          | 8                 | 9                   | 10                  | 11                  | 12                  | 13                   | 14   |                   |
|------------|---------------|------|---------------------------|----------------------|-------------------|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|------|-------------------|
| Tag/<br>ID | Assembly Type | Area | Orientation<br>N, S, W, E | Standard<br>U-Factor | Joint<br>U-Factor | Joint<br>Appendix<br>Table | Cavity<br>R-Value | Exterior<br>R-Value | Interior<br>R-Value | Exterior<br>Furring | Interior<br>Furring | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 1          | Slab          | 385  | N                         | .73                  | .074              | R-19                       | 4.7-1-A1          |                     |                     |                     |                     | New                  |      |                   |
| 2          | Wall          | 165  | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 3          | Wall          | 10   | SE                        | .074                 | .074              | R-19                       | 11                |                     |                     |                     |                     |                      |      |                   |
| 4          | Roof          | 385  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     |                      |      |                   |
| 5          | Slab          | 154  | N                         | .73                  | .074              | R-19                       | 4.7-1-A1          |                     |                     |                     |                     |                      |      |                   |
| 6          | Wall          | 114  | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 7          | Wall          | 102  | SE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 8          | Wall          | 30   | SW                        | .074                 | .074              | R-19                       | 4.2-1-A5          |                     |                     |                     |                     | New                  |      |                   |

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

**PERFILATION SURFACE DETAILS**

| 1          | 2                 | 3               | 4                         | 5          | 6               | 7                  | 8                        | 9        | 10                   | 11   | 12                |
|------------|-------------------|-----------------|---------------------------|------------|-----------------|--------------------|--------------------------|----------|----------------------|------|-------------------|
| Tag/<br>ID | Fenestration Type | Surface<br>Area | Orientation<br>N, S, W, E | # of Panes | Max<br>U-Factor | U-Factor<br>Source | Max<br>(R)SHGC<br>Source | Overhang | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 1          | Window            | 155             | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 2          | Window            | 94              | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 3          | Window            | 90              | SE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 4          | Window            | 28              | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 5          | Window            | 12              | NW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 6          | Window            | 9               | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 7          | Window            | 420             | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |

3.1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms March 2010

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125°*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1          | 2             | 3    | 4                         | 5                    | 6                 | 7                          | 8                 | 9                   | 10                  | 11                  | 12                  | 13                   | 14   |                   |
|------------|---------------|------|---------------------------|----------------------|-------------------|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|------|-------------------|
| Tag/<br>ID | Assembly Type | Area | Orientation<br>N, S, W, E | Standard<br>U-Factor | Joint<br>U-Factor | Joint<br>Appendix<br>Table | Cavity<br>R-Value | Exterior<br>R-Value | Interior<br>R-Value | Exterior<br>Furring | Interior<br>Furring | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 9          | Roof          | 158  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 10         | Slab          | 128  | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 11         | Wall          | 72   | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 12         | Wall          | 40   | SE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 13         | Roof          | 128  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 14         | Roof          | 128  | N                         | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 15         | Slab          | 89   | N                         | .730                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 16         | Wall          | 40   | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 17         | Wall          | 124  | SE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

**PERFILATION SURFACE DETAILS**

| 1          | 2                 | 3               | 4                         | 5          | 6               | 7                  | 8                        | 9        | 10                   | 11   | 12                |
|------------|-------------------|-----------------|---------------------------|------------|-----------------|--------------------|--------------------------|----------|----------------------|------|-------------------|
| Tag/<br>ID | Fenestration Type | Surface<br>Area | Orientation<br>N, S, W, E | # of Panes | Max<br>U-Factor | U-Factor<br>Source | Max<br>(R)SHGC<br>Source | Overhang | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 9          | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 10         | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 11         | Window            | 52              | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 12         | Window            | 4               | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 13         | Window            | 4               | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 14         | Window            | 4               | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 15         | Window            | 14              | NE                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |

3.1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms March 2010

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125°*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1          | 2             | 3    | 4                         | 5                    | 6                 | 7                          | 8                 | 9                   | 10                  | 11                  | 12                  | 13                   | 14   |                   |
|------------|---------------|------|---------------------------|----------------------|-------------------|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|------|-------------------|
| Tag/<br>ID | Assembly Type | Area | Orientation<br>N, S, W, E | Standard<br>U-Factor | Joint<br>U-Factor | Joint<br>Appendix<br>Table | Cavity<br>R-Value | Exterior<br>R-Value | Interior<br>R-Value | Exterior<br>Furring | Interior<br>Furring | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 17         | Roof          | 8    | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 18         | Slab          | 121  | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 19         | Wall          | 114  | SW                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 20         | Wall          | 40   | NW                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 21         | Roof          | 121  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 22         | Slab          | 206  | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 23         | Wall          | 40   | NE                        | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 24         | Wall          | 124  | SE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

**PERFILATION SURFACE DETAILS**

| 1          | 2                 | 3               | 4                         | 5          | 6               | 7                  | 8                        | 9        | 10                   | 11   | 12                |
|------------|-------------------|-----------------|---------------------------|------------|-----------------|--------------------|--------------------------|----------|----------------------|------|-------------------|
| Tag/<br>ID | Fenestration Type | Surface<br>Area | Orientation<br>N, S, W, E | # of Panes | Max<br>U-Factor | U-Factor<br>Source | Max<br>(R)SHGC<br>Source | Overhang | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 17         | Window            | 66              | SN                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 18         | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 19         | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 20         | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 21         | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 22         | Window            | 4               | SW                        | 1          | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |
| 23         | Window            | 152             | SW                        | 10         | .590            | NFRC               | .450                     | NFRC     | New                  |      |                   |

3.1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms March 2010

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125°*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1 |
|---|
|---|

CERTIFICATE OF COMPLIANCE

(Part 1 of 2)

MECH-1

PROJECT NAME

Community Building

DATE

1-14-2012

PROJECT ADDRESS

969 Porter Street

PRINCIPAL DESIGNER-MECHANICAL

Joseph Oakley

TELEPHONE

510-562-6028

Building Permit

DOCUMENTATION AUTHOR

Joseph Oakley

TELEPHONE

510-562-6020

Checked by/Date  
Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS

8/30/2011

BUILDING CONDITIONED FLOOR AREA

2175

CLIMATE ZONE

3

BUILDING TYPE

NONRESIDENTIAL

HIGH RISE RESIDENTIAL

HOTEL/MOTEL GUEST ROOM

PHASE OF CONSTRUCTION

NEW CONSTRUCTION

ADDITION

ALTERATION

UNCONDITIONED (file affidavit)

METHOD OF MECHANICAL COMPLIANCE

PRESCRIPTIVE

PERFORMANCE

PROOF OF ENVELOPE COMPLIANCE

PREVIOUS ENVELOPE PERMIT

ENVELOPE COMPLIANCE ATTACHED

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the building features and performance specifications need to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building mechanical requirements.

The documentation preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR

Joseph Oakley

SIGNATURE

Joseph Oakley

DATE

1-14-2012

The Principal Mechanical Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the mechanical requirements contained in the applicable parts of Sections 110 through 115, 120 through 124, 140 through 142, 144 and 145.

Please check one:

- I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer or mechanical engineer, or I am a licensed architect.
- I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
- I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described pursuant to Business and Professions Code sections 5537, 5538, and 6737.1.

(These sections of the Business and Professions Code are printed in full in the Nonresidential Manual.)

PRINCIPAL MECHANICAL DESIGNER-NAME

Joseph Oakley

SIGNATURE

Joseph Oakley

DATE

1-14-2012

LIC. #

C15457

MECHANICAL MANDATORY MEASURES

Indicate location on plans of Note Block for Mandatory Measures

T24.2

INSTRUCTIONS TO APPLICANT

For Detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

MECH-1: Required on plans for all submittals. Part 2 may be incorporated in schedules on plans.

MECH-2: Required for all submittals, but may be incorporated in schedules on plans.

MECH-3: Required for all submittals unless required ventilation rates and airflows are shown on plans, see 4.3.4.

MECH-4: Required for all prescriptive submittals.

MECH-5: Optional. Performance use only for mechanical distribution summary.

| CERTIFICATE OF COMPLIANCE (Part 2 of 2) MECH-1                  |                    |                    |                                                                                                                    |
|-----------------------------------------------------------------|--------------------|--------------------|--------------------------------------------------------------------------------------------------------------------|
| PROJECT NAME<br>COMMUNITY BUILDING                              |                    | DATE<br>01-14-2012 |                                                                                                                    |
| SYSTEM FEATURES                                                 |                    |                    |                                                                                                                    |
| SYSTEM NAME                                                     | MECHANICAL SYSTEMS |                    |                                                                                                                    |
| TIME CONTROL                                                    | O                  |                    |                                                                                                                    |
| SETBACK CONTROL                                                 | B                  |                    |                                                                                                                    |
| ISOLATION ZONES                                                 | D                  |                    |                                                                                                                    |
| HEAT PUMP THERMOSTAT?                                           | Y                  |                    |                                                                                                                    |
| ELECTRIC HEAT?                                                  | N                  |                    |                                                                                                                    |
| FAN CONTROL                                                     | Const. Vol.        |                    |                                                                                                                    |
| VAV MINIMUM POSITION CONTROL?                                   | N                  |                    |                                                                                                                    |
| SIMULTANEOUS HEAT/COOL?                                         | N                  |                    |                                                                                                                    |
| HEAT AND COOL SUPPLY RESET?                                     | Y                  |                    |                                                                                                                    |
| HEAT REJECTION CONTROL                                          | N                  |                    |                                                                                                                    |
| VENTILATION                                                     | Y                  |                    |                                                                                                                    |
| OUTDOOR DAMPER CONTROL?                                         | N                  |                    |                                                                                                                    |
| ECONOMIZER TYPE                                                 | None               |                    |                                                                                                                    |
| DESIGN O.A. CFM (MECH-3, COLUMN H)                              | 343                |                    |                                                                                                                    |
| HEATING EQUIPMENT TYPE                                          | Heat Pump          |                    |                                                                                                                    |
| HIGH EFFICIENCY? IF YES ENTER EFF. #                            | Y 11.5             |                    |                                                                                                                    |
| MAKE AND MODEL NUMBER                                           |                    |                    |                                                                                                                    |
| COOLING EQUIPMENT TYPE                                          | Fan Coil/Heat Pump |                    |                                                                                                                    |
| HIGH EFFICIENCY? IF YES ENTER EFF. #                            | Y 11.5             |                    |                                                                                                                    |
| MAKE AND MODEL NUMBER                                           | Carrier FX4B030050 | FX3042080          | FX4B048010                                                                                                         |
| PIPE INSULATION REQUIRED?                                       | Y                  |                    |                                                                                                                    |
| PIPE/DUCT INSULATION PROTECTED?                                 | Y                  |                    |                                                                                                                    |
| HEATING DUCT LOCATION                                           | R-VALUE            | 8.0                |                                                                                                                    |
| COOLING DUCT LOCATION                                           | R-VALUE            | 8.0                |                                                                                                                    |
| VERIFIED SEALED DUCTS IN CEILING/ROOF SPACE                     | %FAN FLOW          |                    |                                                                                                                    |
| TABLE OF CODES: Enter code from table below into columns above. |                    |                    |                                                                                                                    |
|                                                                 | Y:Yes              | N:No               |                                                                                                                    |
| HEAT PUMP THERMOSTAT?                                           |                    |                    | TIME CONTROL<br>S: Prog. Switch<br>O: Occupancy Sensor<br>M: Manual Timer                                          |
| ELECTRIC HEAT?                                                  |                    | Y                  | SETBACK CTRL.<br>B: Both<br>C: Cooling<br>H: Heating                                                               |
| VAV MINIMUM POSITION CONTROL?                                   |                    | Y                  | ISOLATION ZONES<br>Enter number of Isolation Zones                                                                 |
| HEAT AND COOL SUPPLY RESET?                                     |                    | Y                  | FAN CONTROL<br>I: Inlet Vanes<br>P: Variable Pitch<br>V: VFD<br>O: Other<br>C: Curve                               |
| SIMULTANEOUS HEAT/COOL?                                         |                    | Y                  |                                                                                                                    |
| HIGH EFFICIENCY?                                                | Y                  |                    | VENTILATION<br>B: Air Balance<br>C: Outside Air Cert.<br>M: Outside Air Measure<br>D: Demand Control<br>N: Natural |
| PIPE INSULATION REQUIRED?                                       | Y                  |                    | OUTDOOR DAMPER<br>A: Auto<br>G: Gravity                                                                            |
| PIPE/DUCT INSULATION PROTECTED?                                 | Y                  |                    | ECONOMIZER<br>A: Air<br>W: Water<br>N: Not Required<br>EC: Economizer Control See Section 144(e)3                  |
| SEALED DUCTS IN CEILING/ROOF SPACE?                             | Y                  |                    | O.A. CFM<br>Enter Design Outdoor Air CFM.<br>Note: This shall be no less than Column H on MECH-3.                  |

| CERTIFICATE OF COMPLIANCE                                       |                     |                    |            | (Part 2 of 2) MECH-1                                                                                |                                     |                                                                                     |                                                                                       |
|-----------------------------------------------------------------|---------------------|--------------------|------------|-----------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| PROJECT NAME                                                    |                     | COMMUNITY BUILDING |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
|                                                                 |                     | DATE<br>01-14-2012 |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SYSTEM FEATURES                                                 |                     |                    |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SYSTEM NAME                                                     |                     | MECHANICAL SYSTEMS |            |                                                                                                     |                                     | NOTE TO FIELD<br>Bldg. Dept. Use                                                    |                                                                                       |
|                                                                 |                     |                    |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| TIME CONTROL                                                    |                     | O                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SETBACK CONTROL                                                 |                     | B                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| ISOLATION ZONES                                                 |                     | D                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEAT PUMP THERMOSTAT?                                           |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| ELECTRIC HEAT?                                                  |                     | N                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| FAN CONTROL                                                     |                     | Combi Vol.         |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| VAV MINIMUM POSITION CONTROL?                                   |                     | N                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SIMULTANEOUS HEAT/COOL?                                         |                     | N                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEAT AND COOL SUPPLY RESET?                                     |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEAT REJECTION CONTROL                                          |                     | N                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| VENTILATION                                                     |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| OUTDOOR DAMPER CONTROL?                                         |                     | N                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| ECONOMIZER TYPE                                                 |                     | None               |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| DESIGN O.A. CFM (MECH-3, COLUMN H)                              |                     | 343                |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEATING EQUIPMENT TYPE                                          |                     | Heat Pump          |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HIGH EFFICIENCY?                                                | IF YES ENTER EFF. # | Y 11.5             |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| MAKE AND MODEL NUMBER                                           |                     |                    |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| COOLING EQUIPMENT TYPE                                          |                     | Fan Coil/Heat Pump |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HIGH EFFICIENCY?                                                | IF YES ENTER EFF. # | Y 11.5             |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| MAKE AND MODEL NUMBER                                           |                     | Carrier FX4B030050 | FX4B042080 | FX4B048010                                                                                          |                                     |                                                                                     |                                                                                       |
| PIPE INSULATION REQUIRED?                                       |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| PIPE/DUCT INSULATION PROTECTED?                                 |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEATING DUCT LOCATION                                           | R-VALUE             | 8.0                |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| COOLING DUCT LOCATION                                           | R-VALUE             | 8.0                |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| VERIFIED SEALED DUCTS IN CEILING/ROOF SPACE                     |                     |                    |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| TABLE OF CODES: Enter code from table below into columns above. |                     |                    |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
|                                                                 |                     | Y:Yes              | N:No       | TIME CONTROL                                                                                        | SETBACK CTRL.                       | ISOLATION ZONES                                                                     | FAN CONTROL                                                                           |
| HEAT PUMP THERMOSTAT?                                           |                     |                    |            | S: Prog. Switch<br>O: Occupancy Sensor<br>M: Manual Timer                                           | B: Both<br>C: Cooling<br>H: Heating | Enter number of Isolation Zones                                                     | I: Inlet Vanes<br>P: Variable Pitch<br>V: VFD<br>O: Other<br>C: Curve                 |
| ELECTRIC HEAT?                                                  |                     |                    | N          |                                                                                                     |                                     |                                                                                     |                                                                                       |
| VAV MINIMUM POSITION CONTROL?                                   |                     |                    | N          |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEAT AND COOL SUPPLY RESET?                                     |                     |                    | Y          |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SIMULTANEOUS HEAT/COOL?                                         |                     |                    | N          |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HIGH EFFICIENCY?                                                |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| PIPE INSULATION REQUIRED?                                       |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| PIPE/DUCT INSULATION PROTECTED?                                 |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SEALED DUCTS IN CEILING/ROOF SPACE?                             |                     | Y                  |            |                                                                                                     |                                     |                                                                                     |                                                                                       |
|                                                                 |                     |                    |            | VENTILATION                                                                                         | OUTDOOR DAMPER                      | ECONOMIZER                                                                          | O.A. CFM                                                                              |
|                                                                 |                     |                    |            | B: Air Balance<br>C: Outside Air Cert.<br>M: Outside Air Measure<br>D: Demand Control<br>N: Natural | A: Auto<br>G: Gravity               | A: Air<br>W: Water<br>N: Not Required<br>EC: Economizer Control See Section 144(e)3 | Enter Design Outdoor Air CFM.<br>Note: This shall be no less than Column H on MECH-3. |

| <b>WATER SIDE SYSTEM REQUIREMENTS</b>                                      |                |                                                                                  |  |                  |  | (Part 2 of 3) <b>MECH-2C</b> |
|----------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------|--|------------------|--|------------------------------|
| PROJECT NAME: COMMUNITY BUILDING                                           |                |                                                                                  |  | DATE: 01-14-2012 |  |                              |
| Item or System Tags<br>(i.e. AC-1, RTU-1, HP-1, CT-1, etc...) <sup>1</sup> | No. of Systems | <b>WATER<sup>2</sup> SIDE SYSTEMS: Chillers, Towers, Boilers, Hydronic Loops</b> |  |                  |  |                              |
|                                                                            |                |                                                                                  |  |                  |  |                              |
| <i>Indicate Page Reference on Plans or Specification<sup>2</sup></i>       |                |                                                                                  |  |                  |  |                              |
| <b>MANDATORY MEASURES</b>                                                  |                | <i>T-24 Sections</i>                                                             |  |                  |  |                              |
| Equipment Efficiency                                                       |                | 112(a)                                                                           |  |                  |  |                              |
| Pipe Insulation                                                            |                | 123                                                                              |  |                  |  |                              |
| <b>PRESCRIPTIVE MEASURES</b>                                               |                | 144(h)                                                                           |  |                  |  |                              |
| Cooling Tower Fan Controls                                                 |                | 144(h)                                                                           |  |                  |  |                              |
| Cooling Tower Flow Controls                                                |                | 144(j)                                                                           |  |                  |  |                              |
| Variable Flow System Design                                                |                | 144(j)                                                                           |  |                  |  |                              |
| Chiller and Boiler Isolation                                               |                | 144(j)                                                                           |  |                  |  |                              |
| CHW and HHW Reset Controls                                                 |                | 144(j)                                                                           |  |                  |  |                              |
| WLHP Isolation Valves                                                      |                | 144(j)                                                                           |  |                  |  |                              |
| VSD on CHW, CW & WLHP Pumps >5HP                                           |                | 144(j)                                                                           |  |                  |  |                              |
| DP Sensor Location                                                         |                | 144(j)                                                                           |  |                  |  |                              |

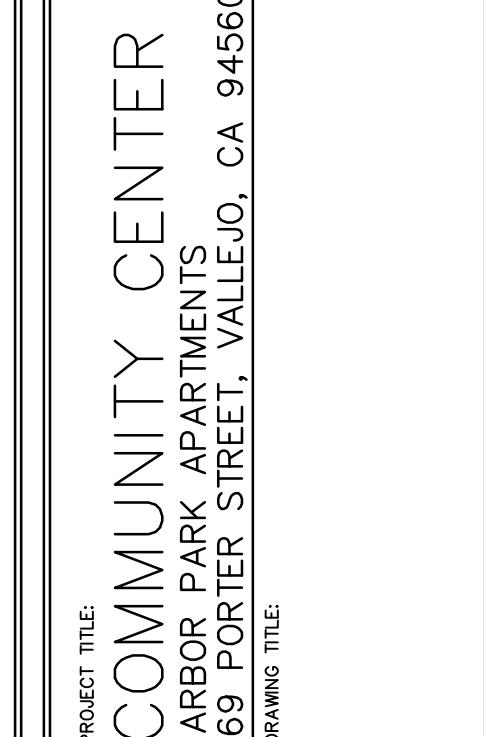
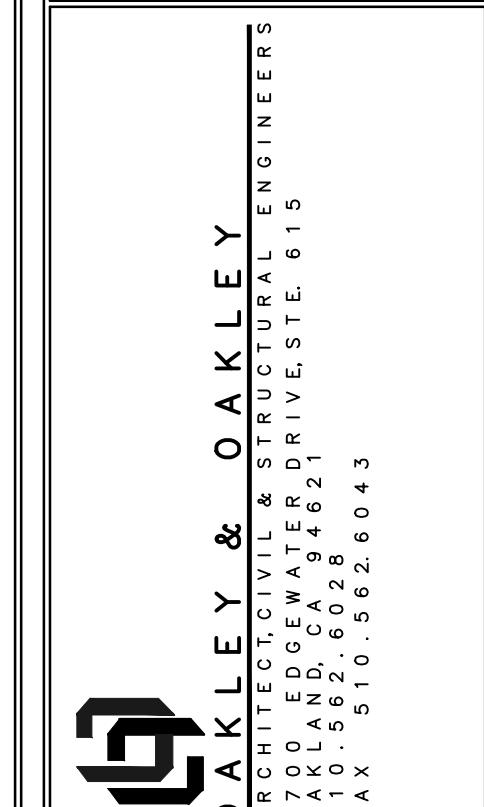
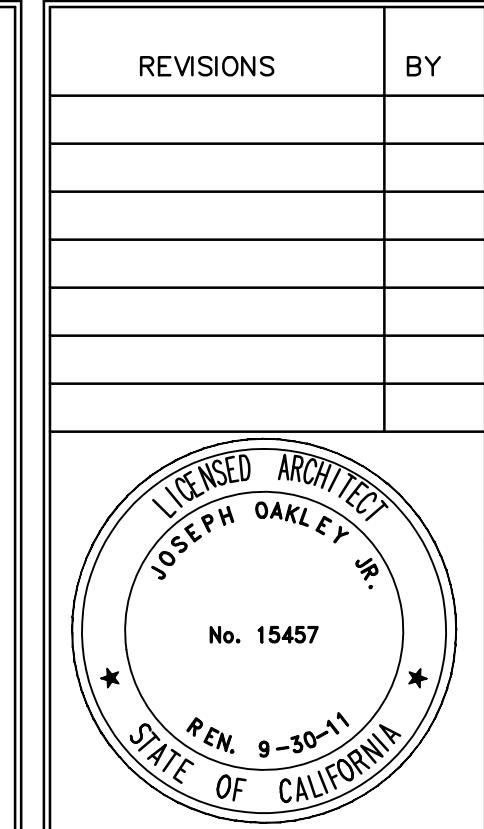
1. The Proposed equipment need to match the building plans schedule or specifications. If a requirement is not applicable, put "N/A" in the column next to applicable section.  
 2. For each chiller, cooling tower, boiler, and hydronic loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column next to applicable section.

| SERVICE HOT WATER & POOL/SPA REQUIREMENTS                                                                                                                                                                                                                                                     |                                                           |                  |          |  |       |  | (Part 3 of 3) | MECH-2C |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------|----------|--|-------|--|---------------|---------|
| PROJECT NAME: COMMUNITY BUILDING                                                                                                                                                                                                                                                              |                                                           |                  |          |  | DATE: |  | 01-14-2012    |         |
| Item or System Tags<br>(i.e. WH-1, WHP, DHW, etc...) <sup>1</sup>                                                                                                                                                                                                                             | Service Hot Water, Pool Heating                           |                  |          |  |       |  |               |         |
|                                                                                                                                                                                                                                                                                               |                                                           |                  |          |  |       |  |               |         |
| No. of Systems                                                                                                                                                                                                                                                                                |                                                           |                  |          |  |       |  |               |         |
|                                                                                                                                                                                                                                                                                               |                                                           |                  |          |  |       |  |               |         |
| MANDATORY MEASURES                                                                                                                                                                                                                                                                            | Indicate Page Reference on Plans or Schedule <sup>2</sup> |                  |          |  |       |  |               |         |
|                                                                                                                                                                                                                                                                                               | T-24 Section                                              |                  |          |  |       |  |               |         |
| SERVICE HOT WATER                                                                                                                                                                                                                                                                             |                                                           |                  |          |  |       |  |               |         |
| Certified Water Heater                                                                                                                                                                                                                                                                        | §111, §113 (a)                                            | STATE INDUSTRIES | GS640Y0C |  |       |  |               |         |
| Water Heater Efficiency                                                                                                                                                                                                                                                                       | §113 (b)                                                  | .62EF            |          |  |       |  |               |         |
| Service Water Heating Installation                                                                                                                                                                                                                                                            | §113 (c)                                                  |                  |          |  |       |  |               |         |
| Pipe Insulation                                                                                                                                                                                                                                                                               | §123                                                      |                  |          |  |       |  |               |         |
| POOL AND SPA                                                                                                                                                                                                                                                                                  |                                                           |                  |          |  |       |  |               |         |
| Pool and Spa Efficiency and Control                                                                                                                                                                                                                                                           | §114 (a)                                                  |                  |          |  |       |  |               |         |
| Pool and Spa Electric Resisting Heating                                                                                                                                                                                                                                                       | §114 (b)                                                  |                  |          |  |       |  |               |         |
| Exception                                                                                                                                                                                                                                                                                     |                                                           |                  |          |  |       |  |               |         |
| Pool and Spa Installation                                                                                                                                                                                                                                                                     | §114 (b)                                                  |                  |          |  |       |  |               |         |
| Pool Heater – No Pilot Light                                                                                                                                                                                                                                                                  | §115 (c)                                                  |                  |          |  |       |  |               |         |
| Spa Heater – No Pilot Light                                                                                                                                                                                                                                                                   | §115 (d)                                                  |                  |          |  |       |  |               |         |
| Pipe Insulation                                                                                                                                                                                                                                                                               | §123                                                      |                  |          |  |       |  |               |         |
| 1: The Proposed equipment need to match the building plans schedule or specifications. If a requirement is not applicable, put "N/A" in the column next to the measure.                                                                                                                       |                                                           |                  |          |  |       |  |               |         |
| 2: For each water heater, pool heat and domestic water loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column. |                                                           |                  |          |  |       |  |               |         |

| CERTIFICATE OF COMPLIANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                            |                                                   | (Page 1 of 4) LTG-1C                          |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------|----------------|----------------------------------------------------|------------------------------------------------|--------------------------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------------------|------------------------|------------------------------------------------------|-----------------------------------|-------------------------------------|-----------------------|--------------------------------------------|---------------------------------------------------|-----------------------------------|
| Project Name:<br><i>Community Bldg</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                            | Date:<br><b>01-14-2012</b>                        |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Project Address:<br><i>969 Porter Street</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                            | Climate Zone:<br><b>3</b>                         | Building CFA :<br><i>2200</i>                 |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            | Unconditioned Floor Area :                        |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <b>General Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <table border="0"> <tr> <td>Building Type:</td> <td><input checked="" type="checkbox"/> Nonresidential</td> <td><input type="checkbox"/> High-Rise Residential</td> <td><input type="checkbox"/> Hotel/Motel</td> </tr> <tr> <td><input type="checkbox"/> Schools</td> <td><input type="checkbox"/> Relocatable Public Schools</td> <td><input type="checkbox"/> Conditioned Spaces</td> <td><input type="checkbox"/> Unconditioned Spaces</td> </tr> <tr> <td>Phase of Construction:</td> <td><input checked="" type="checkbox"/> New Construction</td> <td><input type="checkbox"/> Addition</td> <td><input type="checkbox"/> Alteration</td> </tr> <tr> <td>Method of Compliance:</td> <td><input type="checkbox"/> Complete Building</td> <td><input checked="" type="checkbox"/> Area Category</td> <td><input type="checkbox"/> Tailored</td> </tr> </table> |                                                                            |                                                   |                                               | Building Type: | <input checked="" type="checkbox"/> Nonresidential | <input type="checkbox"/> High-Rise Residential | <input type="checkbox"/> Hotel/Motel | <input type="checkbox"/> Schools | <input type="checkbox"/> Relocatable Public Schools | <input type="checkbox"/> Conditioned Spaces | <input type="checkbox"/> Unconditioned Spaces | Phase of Construction: | <input checked="" type="checkbox"/> New Construction | <input type="checkbox"/> Addition | <input type="checkbox"/> Alteration | Method of Compliance: | <input type="checkbox"/> Complete Building | <input checked="" type="checkbox"/> Area Category | <input type="checkbox"/> Tailored |
| Building Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input checked="" type="checkbox"/> Nonresidential                         | <input type="checkbox"/> High-Rise Residential    | <input type="checkbox"/> Hotel/Motel          |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <input type="checkbox"/> Schools                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> Relocatable Public Schools                        | <input type="checkbox"/> Conditioned Spaces       | <input type="checkbox"/> Unconditioned Spaces |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Phase of Construction:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> New Construction                       | <input type="checkbox"/> Addition                 | <input type="checkbox"/> Alteration           |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Method of Compliance:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> Complete Building                                 | <input checked="" type="checkbox"/> Area Category | <input type="checkbox"/> Tailored             |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <b>Documentation Author's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <ul style="list-style-type: none"> <li>I certify that this Certificate of Compliance documentation is accurate and complete.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Signature:<br><i>Joseph Oakley</i>                                         |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Date :<br><i>1-14-2012</i>                                                 |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | If applicable:<br>CEA #<br>CEPE #                                          |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| City/State/Zip<br><i>Oakland, Ca. 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Phone:<br><i>510-562-6020</i>                                              |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <b>Principal Lighting Designer's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <ul style="list-style-type: none"> <li>I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.</li> <li>This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.</li> <li>The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.</li> </ul>                                                                                                                                         |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Signature:<br><i>Joseph Oakley</i>                                         |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Phone:<br><i>510-562-6020</i>                                              |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | License #<br><i>C15457</i>                                                 |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| City/State/Zip:<br><i>Oakland, Ca. 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Date:<br><i>1-14-2012</i>                                                  |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <b>Lighting Mandatory Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| Indicate location on building plans of Mandatory Measures Note Block: <i>T24, 3</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <b>LIGHTING COMPLIANCE FORMS &amp; WORKSHEETS (check box if worksheet is included)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <input checked="" type="checkbox"/> LTG-1C Pages 1 through 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Certificate of Compliance. All Pages required on plans for all submittals. |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <input type="checkbox"/> LTG-2C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Lighting Controls Credit Worksheet                                         |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <input type="checkbox"/> LTG-3C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Indoor Lighting Power Allowance                                            |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <input type="checkbox"/> LTG-4C Pages 1 through 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Tailored Method Worksheet                                                  |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |
| <input type="checkbox"/> LTG-5C Pages 1 and 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Line Voltage Track Lighting Worksheet                                      |                                                   |                                               |                |                                                    |                                                |                                      |                                  |                                                     |                                             |                                               |                        |                                                      |                                   |                                     |                       |                                            |                                                   |                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            |                          |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------|--------------------------|--------------------------|
| <b>CERTIFICATE OF COMPLIANCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 | (Page 3 of 4)    LTG-1C    |                          |                          |
| Project Name:<br><b>COMMUNITY BUILDING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                 | Date:<br><b>01-14-2012</b> |                          |                          |
| <b>INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                            |                          |                          |
| <p>Fill in controls for all spaces: a) area controls, b) multi-level controls, c) manual daylighting controls for daylit areas &gt; 250 ft<sup>2</sup>, automatic daylighting controls for daylit areas &gt; 2,500 ft<sup>2</sup>, d) shut-off controls, e) display lighting controls, f) tailored lighting controls - general lighting controlled separately from display, ornamental and display case lighting and g) demand responsive automatic controls for retail stores &gt; 50,000 ft<sup>2</sup>, in accordance with Section 131.</p> |                 |                            |                          |                          |
| <b>MANDATORY LIGHTING CONTROLS - FIELD INSPECTION ENERGY CHECKLIST</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                            |                          |                          |
| Type / Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Number of Units | Location in Building       | Field Inspector          |                          |
| <i>Occupancy Sensor</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3               | <i>offices</i>             | Special Features         |                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                            | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>SPECIAL FEATURES INSPECTION CHECKLIST (See Page 2 of 4 of LTG-1C)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                            |                          |                          |
| <p>The local enforcement agency should pay special attention to the items specified in this checklist. These items require special written justification and documentation, and special verification. The local enforcement agency determines the adequacy of the justification, and may reject a building or design that otherwise complies based on the adequacy of the special justification and documentation submitted.</p>                                                                                                               |                 |                            |                          |                          |
| <b>Field Inspector's Notes or Discrepancies:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |                            |                          |                          |
| <p> </p> <p> </p> <p> </p> <p> </p> <p> </p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                 |                            |                          |                          |

| CERTIFICATE OF COMPLIANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                            |                            | (Page 1 of 4)      LTG-1C     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------|-------------------------------|
| Project Name:<br><i>Community Bldg</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            | Date:<br><b>01-14-2012</b> |                               |
| Project Address:<br><i>969 Porter Street</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            | Climate Zone:<br><b>3</b>  | Building CFA :<br><i>2200</i> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                            | Unconditioned Floor Area : |                               |
| <b>General Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                            |                               |
| Building Type: <input checked="" type="checkbox"/> Nonresidential <input type="checkbox"/> High-Rise Residential <input type="checkbox"/> Hotel/Motel<br><input type="checkbox"/> Schools <input type="checkbox"/> Relocatable Public Schools <input type="checkbox"/> Conditioned Spaces <input type="checkbox"/> Unconditioned Spaces<br>Phase of Construction: <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Addition <input type="checkbox"/> Alteration<br>Method of Compliance: <input type="checkbox"/> Complete Building <input checked="" type="checkbox"/> Area Category <input type="checkbox"/> Tailored                                                                        |                                                                            |                            |                               |
| <b>Documentation Author's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                            |                            |                               |
| <ul style="list-style-type: none"> <li>I certify that this Certificate of Compliance documentation is accurate and complete.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            |                            |                               |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Signature:<br><i>Joseph Oakley</i>                                         |                            |                               |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date :<br><i>1-14-2012</i>                                                 |                            |                               |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | If applicable:<br>CEA #<br>CEPE #                                          |                            |                               |
| City/State/Zip<br><i>Oakland, CA 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Phone:<br><i>510-562-6020</i>                                              |                            |                               |
| <b>Principal Lighting Designer's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                            |                               |
| <ul style="list-style-type: none"> <li>I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.</li> <li>This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.</li> <li>The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.</li> </ul> |                                                                            |                            |                               |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Signature:<br><i>Joseph Oakley</i>                                         |                            |                               |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Phone:<br><i>510-562-6020</i>                                              |                            |                               |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | License #<br><i>215457</i>                                                 |                            |                               |
| City/State/Zip:<br><i>Oakland, CA 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Date:<br><i>1-14-2012</i>                                                  |                            |                               |
| <b>Lighting Mandatory Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            |                            |                               |
| Indicate location on building plans of Mandatory Measures Note Block: <u><i>T24, 3</i></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                            |                               |
| <b>LIGHTING COMPLIANCE FORMS &amp; WORKSHEETS (check box if worksheet is included)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            |                            |                               |
| For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                            |                            |                               |
| <input checked="" type="checkbox"/> LTG-1C Pages 1 through 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Certificate of Compliance. All Pages required on plans for all submittals. |                            |                               |
| <input type="checkbox"/> LTG-2C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Lighting Controls Credit Worksheet                                         |                            |                               |
| <input type="checkbox"/> LTG-3C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Indoor Lighting Power Allowance                                            |                            |                               |
| <input type="checkbox"/> LTG-4C Pages 1 through 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tailored Method Worksheet                                                  |                            |                               |
| <input type="checkbox"/> LTG-5C Pages 1 and 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Line Voltage Track Lighting Worksheet                                      |                            |                               |



PROJECT TITLE: **COM  
ARBOR P  
69 PORT**

DRAWING TITLE:

|          |            |
|----------|------------|
| Date:    | 08/30/2011 |
| Scale:   | AS NOTED   |
| Drawn:   | STAFF      |
| Checked: | RY         |
| Job No.: | 2011-09    |

# T24.4

Community Bldg Drawings\electrical\124.1.dwg

Page 1 of 5

**Mandatory Measures Summary** **MF-1R**  
(Page 1 of 3)

**Residential**  
Site Address: HARBOR PARK APARTMENTS | Enforcement Agency: 3 | Date: 12-10-2012

**NOTE:** Low-rise residential buildings subject to the Standards must comply with all applicable mandatory measures listed, regardless of the compliance approach used. More stringent energy measures listed on the Certificate of Compliance (CF-1R, CF-1R-ADD, or CF-1R-ALT Form) shall supersede the items marked with an asterisk (\*) below. This Mandatory Measures Summary is incorporated into the permit documents and the applicable standards shall be considered by all parties as minimum component performance standards, whether they are shown elsewhere in the documents or in this summary. Submit all applicable sections of the MF-1R Form with plans.

**DESCRIPTION**

**Building Envelope Measures:**

**§116(a):** Doors and windows between conditioned and unconditioned spaces are manufactured to limit air leakage.

**§116(a):** All exterior doors and windows (excluding windows with labels listing the certified U-factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration that meets the requirements of §117(a)) must be certified to have a U-factor of 0.11 or less.

**§117:** Exterior doors and windows are weather-stripped. All joints and penetrations are caulked and sealed.

**§118(a):** Insulation specified or installed meets Standards for Insulation Material. Indicate type and include on CF-4R Form.

**§118(b):** The thermal emittance and solar reflectance values of the cool roofing material meets the requirements of §118(g) when the installation of a Cool Roof is specified on the CF-1R Form.

**\*\$150(a):** Minimum R-19 insulation in wood-frame ceiling or equivalent U-factor.

**\*\$150(b):** Minimum R-13 insulation in wood-frame wall or equivalent U-factor.

**\*\$150(d):** Minimum R-13 insulation in raised wood-frame floor or equivalent U-factor.

**§150(f):** Air retarding wrap is tested, labeled, and installed according to ASTM E1677-95(2000) when specified on the CF-1R Form.

**§150(g):** Mandatory Vapor barrier installed in Climate Zones 14 or 16.

**§150(h):** Water absorption rate for slab edge insulation material alone without facing is no greater than 0.3%; water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration.

**Fireplaces, Decorative Gas Appliances and Gas Log Measures:**

**§150(e):** Masonry or factory-built fireplaces have a closure metal or glass door covering the entire opening of the fireplace.

**§150(e):** Masonry or factory-built fireplaces have a closure metal or glass door covering the entire opening of the fireplace.

**§150(e):** Continuous burning pilot lights and the use of indoor air is vented to the outside of the building, are prohibited.

**Space Conditioning, Water Heating and Plumbing System Measures:**

**§118-§119:** HVAC equipment, water heaters, showers and all other regulated appliances are certified by the Energy Commission.

**§119(g):** Water heating restrictions for serving multiple dwelling units and High-Rise Residential Buildings must meet the air release valve, low-flow pressure, pump isolation, and tank heat loss requirements of §119(g).

**§115:** Continuously burning pilot lights are prohibited for natural gas, fan-type central furnaces, household cooking appliances (appliances with an electrical supply voltage connection with pilot lights that consume less than 150 Huhr are exempt), and pool and spa heaters.

**§150(h):** Heating and/or cooling loads are calculated in accordance with ASHRAE, SMACNA or ACCA.

**§150(i):** Heating systems are equipped with thermostats that meet the setback requirements of Section 112(c).

**§150(j):** Storage water heaters rated with an Energy Factor no greater than the federal minimum standard are externally wrapped with insulation that meets the requirements of §150(j).

**§150(j):** Unfired storage tanks, such as storage tanks or backup tanks for solar water-heating system, or other indirect hot water tanks have R-12 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.

**§150(j):** For a tank of hot and cold water pipes closest to water heater, non-recirculating systems, and entire length of recirculating sections of hot and cold water pipes, the insulation must meet the requirements of Table 112-5.

**§150(j):** Cooling system piping (section, chilled water, or brine lines) and piping insulated between heating source and indirect hot water tank shall be insulated to Table 150-8 and Equation 150-A.

**§150(j):** Pipe insulation for steam hydronic heating systems or hot water systems >15 psi, meets the requirements of Standards Table 123-A.

**§150(j):** Insulation is protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.

**§150(j):** Insulation for chilled water piping and refrigerant suction lines includes a vapor retardant or is enclosed entirely in conditioned space.

**2008 Residential Compliance Forms** **August 2009**

**Mandatory Measures Summary** **MF-1R**  
(Page 2 of 3)

**Residential**  
Site Address: HARBOR PARK APARTMENTS | Enforcement Agency: 3 | Date: 2

**§150(j):** Solar water-heating systems and/or collectors are certified by the Solar Rating and Certification Corporation.

**Ducts and Fans Measures:**

**§150(m):** All air-distribution system ducts and plenums installed, are sealed and insulated to meet the requirements of CMC Sections 601, 602, 603, 604, 605 and NFPA 6-5. All supply ducts and plenums shall be insulated to a minimum required level of R-4.2 or enclosed in a conditioned space. Openings shall be sealed with mastic, tape or other sealant-system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.

**§150(m):** Ducts, cables, support plates, and plenums, and flexible ducts or flexible transition ducts installed in conditioned space, shall not be exposed to the exterior of the building or to unconditioned areas. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.

**§150(m):** Ducts, joints and seams of ducts and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is specifically designed for this purpose.

**§150(m):** Ducts, joints and seams of ducts and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is specifically designed for this purpose.

**§150(m):** Exhaust fans have been draft or automatic dampers.

**§150(m):** Gravity ventilating systems serving conditioned spaces have either automatic, or manually accessible, manually operated dampers.

**§150(m):** Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

**§150(m):** Flexible ducts cannot have porous inner cores.

**§150(m):** Low-Rise Residential Buildings. Window operation is not a permissible method of providing the Whole Building Ventilation required in Section 4 of that Standard.

**Pool and Spa Heating Systems and Equipment Measures:**

**§114(a):** Any pool or spa heating system shall be certified to have a thermal efficiency that complies with the Appliance Efficiency Regulations; shall be certified to have a permanent heat exchanger or a permanent weatherhead plate or card with operating instructions; and shall not use electric resistance heating or a pool light.

**§114(b):** Any pool or spa heating equipment shall be installed with at least 36° of pipe between filter or heater, or dedicated suction and return lines, or built-up connections for future solar heating.

**§114(b):** Pools shall have a pump that takes the water from the pool and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.

**Residential Lighting Measures:**

**§150(k):** High efficacy luminaires or LED Light Engine with Integral Heat Sink has an efficacy that is no lower than the efficacies contained in Table 150-2, and is not a low efficacy luminaire as specified by §150(k).

**§150(k):** The wattage of permanently installed luminaires shall be determined as specified by §130(d).

**§150(k):** Ballasts for fluorescent lamps rated 13 Watts or greater shall be electronic and shall have an output frequency no less than 20 kHz.

**§150(k):** Ballasts for fluorescent lamps rated 13 Watts or greater shall be electronic and shall have an output frequency no less than 20 kHz. Efficacy lamps meeting the minimum efficacies contained in Table 150-2 and shall not contain a line-voltage or low-voltage screw-in socket; or shall be rated to consume no more than five watts of power as determined by §130(d), and shall not contain a medium screw-in socket.

**§150(k):** Residential fans shall meet the requirements of §150(k).

**§150(k):** All existing devices and controls shall meet the requirements of §150(k).

**§150(k):** A minimum of 50 percent of the total rated wattage of permanently installed lighting in kitchens shall be high efficacy; EXCEPTION: Up to 50 watts for dwelling units less than or equal to 2,500 ft<sup>2</sup> or 100 watts for dwelling units larger than 2,500 ft<sup>2</sup> may be exempt from the 50% high efficacy requirement where all low efficacy luminaires in the kitchen are controlled by a central electronic control system, and the control system automatically turns off all permanently installed luminaires in garages, laundry rooms, closets greater than 70 square feet, and utility rooms are high efficacy and controlled by a manual-on/occupant sensor.

**§150(k):** Permanently installed lighting that is internal to cabinets shall use no more than 20 watts of power per linear foot of illuminated cabinet.

**§150(k):** Permanently installed luminaires in bathrooms, attached and detached garages, laundry rooms, closets and utility rooms shall be high efficacy.

**2008 Residential Compliance Forms** **August 2009**

**Mandatory Measures Summary** **MF-1R**  
(Page 3 of 3)

**Residential**  
Site Address: HARBOR PARK APARTMENTS | Enforcement Agency: 3 | Date: 2

**EXCEPTION 1:** Permanently installed low efficacy luminaires shall be allowed provided that they are controlled by a manual-on/occupant sensor certified to comply with the applicable requirements of §119.

**EXCEPTION 2:** Permanently installed low efficacy luminaires in closets less than 70 square feet are not required to be controlled by a manual-on/occupant sensor.

**§150(k):** Permanently installed luminaires located in rooms or areas other than kitchens, bathrooms, garages, laundry rooms, closets, and utility rooms shall be high efficacy luminaires.

**EXCEPTION:** Permanently installed low efficacy luminaires shall be allowed provided they are controlled by either a dimmer switch that complies with the applicable requirements of §119, or by a manual-on/occupant sensor that complies with the applicable requirements of §119.

**EXCEPTION 2:** Light fixture assemblies containing less than 1,000 square feet located on a residential site is not required to comply with §150(k).

**§150(k):** Luminaires recessed into unvented ceilings shall be listed for zero clearance insulation rating (IC) by Underwriters Laboratories or other nationally recognized testing laboratory, and have a label that certifies the luminaire is airtight with leakage less than 2.0 CFM / 7.5 Pascals when tested in accordance with ASTM E283; and be sealed with a gasket or caulk between the luminaire housing and ceiling.

**§150(k):** Luminaires providing outdoor lighting, including lighting for private patios in low-rise residential buildings with four or more dwelling units, entrances, balconies, and porches, which are permanently mounted to a residential building or to other buildings on the same lot shall be high efficacy.

**EXCEPTION:** Permanently installed outdoor low efficacy luminaires shall be allowed provided that they are controlled by a manual on/off switch, a motion sensor not having an override or bypass switch that disables the motion sensor, and one of the following controls: a photocell not having an override or bypass switch that disables the photocell; OR an ambient light sensor not having an override or bypass switch that disables the ambient light sensor; OR a manual energy management control system (EMCS) not having an override or bypass switch that allows the luminaire to be always on.

**EXCEPTION 2:** Luminaires used to comply with Exception 1 of §150(k) shall be controlled by a temporary override switch which bypasses the motion sensing function provided that the motion sensor is automatically reset/activated within six hours.

**EXCEPTION 2:** Permanently installed luminaires in or around swimming pool, water feature, or other location subject to Article 680 of the California Electric Code need not be high efficacy luminaires.

**§150(k):** Internally illuminated address signs shall comply with Section 148; OR not contain a screw-base socket, and consume no more than five watts of power as determined according to §150(k).

**§150(k):** Lighting for garage lots and common areas for 8 or more vehicles per site shall comply with the applicable requirements in Sections 130, 131, 134, and 147. Lighting for parking garages for 8 or more vehicles shall comply with the applicable requirements of Sections 130, 131, 134, and 146.

**§150(k):** Permanently installed low efficacy luminaires shall be allowed provided that they are controlled by an occupant sensor(s) certified to comply with the applicable requirements of §119.

**Prescriptive Certificate of Compliance: Residential** **CF-1R**  
(Page 1 of 5)

**Newly Constructed Buildings and Additions Greater Than 1,000 ft<sup>2</sup>**  
Project Name: HARBOR PARK APARTMENTS | Climate Zone # 3 | # of Stories 2

**General Information**

**Site Address:** 969 PORTER ST. **Enforcement Agency:** Date: 12-10-2012

**Building Type:** □ Single Family □ Multi Family **Conditioned Floor Area<sup>1</sup> (CFA):** 2504

**Circle the Front Orientation:** □ N, S, W, or E **Project Type:** □ New Building Construction □ New Addition<sup>2</sup> greater than 1,000 ft<sup>2</sup> **1. Does the addition meet the applicable requirements of Component Package D:**  **2. Is the addition in Climate Zones 1 and 16 only? See footnotes to Table 151-D for alternative optional requirements:**

**Opaque Surface Details** For the furred portion of Mass Walls see Furring Strips Construction Table below.

| A        | B                                  | C         | D                     | E                | F                               | G                   | H                              | I   | J |
|----------|------------------------------------|-----------|-----------------------|------------------|---------------------------------|---------------------|--------------------------------|-----|---|
| Proposed | See Note                           | Standard  | Value from J4A Table  |                  |                                 |                     |                                |     |   |
| Tag ID   | Assembly Name or Type <sup>2</sup> | Thickness | U-factor <sup>3</sup> | J4A Table Number | Continuous R-value <sup>4</sup> | JA Assembly Row/Col | Proposed U-factor <sup>5</sup> |     |   |
| 1        | WALL                               | .254      | .16                   | 102              | R13                             | 0                   | .34                            | 102 |   |
| 2        | FLOOR                              | .251      | .05                   | 102              | R30                             | 0                   | .16                            | 102 |   |

Notes: For furred assemblies, accounting for Continuous R-value, see Page J4-4 and Equation 4-1. For calculating furred walls use the Mass and Furring Construction table below.

1. For furred assemblies, accounting for Continuous R-value, see Page J4-4 and Equation 4-1. For calculating furred walls use the Mass and Furring Construction table below.

2. Refer to the HERS verification table on Pages 4 and 5 of the CF-1R Form for additional requirements and check applicable boxes.

3. Indicate Type (e.g. Wood, Metal, Insulated Metal, Gypsum, etc.)

4. List water heaters and boilers for both domestic hot water (DHW) heaters and hydronic space heating. Individual dwelling DHW heaters must be gas or propane fired and may not use recirculation pumps. Hot water pipe insulation from the DHW heater to the fixture(s) and on all underground water pipes is required in all component packages in all climate zones.

5. Water Heating

List water heaters and boilers for both domestic hot water (DHW) heaters and hydronic space heating. Individual dwelling DHW heaters must be gas or propane fired and may not use recirculation pumps. Hot water pipe insulation from the DHW heater to the fixture(s) and on all underground water pipes is required in all component packages in all climate zones.

| Water Heater Type/Fuel | Distribution Type | Configuration (Standard, Split, Space, Package or Hydronic) | Minimum Efficiency (SEER or HSPF or COP) | Distribution Type and Location <sup>1</sup> | Duct or Piping Insulation R-value <sup>2</sup> | Thermostat Type | Configuration (Standard, Split, Space, Package or Hydronic) |
|------------------------|-------------------|-------------------------------------------------------------|------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------|-------------------------------------------------------------|
| RES. HVAC              | DUCTS             | SPLIT                                                       | 14.0                                     |                                             | 6.0                                            | SETBACK         |                                                             |

1. Indicate Type (A/C, Heat Pump, Evaporative Cooling, etc.)

2. Refer to the HERS verification table on Pages 4 and 5 of the CF-1R Form for additional requirements and check applicable boxes.

3. Indicate Type (e.g. Wood, Metal, Insulated Metal, Gypsum, etc.)

4. Water Heating

List water heaters and boilers for both domestic hot water (DHW) heaters and hydronic space heating. Individual dwelling DHW heaters must be gas or propane fired and may not use recirculation pumps. Hot water pipe insulation from the DHW heater to the fixture(s) and on all underground water pipes is required in all component packages in all climate zones.

5. Water Heating

List water heaters and boilers for both domestic hot water (DHW) heaters and hydronic space heating. Individual dwelling DHW heaters must be gas or propane fired and may not use recirculation pumps. Hot water pipe insulation from the DHW heater to the fixture(s) and on all underground water pipes is required in all component packages in all climate zones.

**SPECIAL FEATURES** The enforcement agency should pay special attention to the Special Features specified in this checklist below. These items may require written justification and documentation and special verification.

**Radiant Barrier (Roof)**  YES Required in Climate Zones 2, 11 & 16 under Component Packages C, D and E.

**Slab Edge (Perimeter) Insulation**  YES YES. Slab edge insulation required for heated slabs in all Component Packages C, D and E.

**Heated Slab Insulation**  YES YES. Slab edge insulation required for heated slabs in all Component Packages in all Climate Zones. See details in Table 118-A of the standards.

**Raised Slab Insulation**  NO YES. In Climate Zones 1, 2, 11, 13, 14 & R-8 insulation is required, and in Climate Zones 12 & R-4 insulation is required under Component Packages D and E. Raised slab insulation is not required in Component Package C.

**Thermal Mass**  YES YES. In Component Package C for all Climate Zones, a Minimum Interior Mass Capacity (IMC) must be achieved per Table 151-A of the standards. If Yes, submit a completed WS-1R Form.

**Registration Number:** **Registration Date/Time:** **HERS Provider:** **March 2010**  
2008 Residential Compliance Forms

**Prescriptive Certificate of Compliance: Residential** **CF-1R**  
(Page 2 of 5)

**Newly Constructed Buildings and Additions Greater Than 1,000 ft<sup>2</sup>**  
Project Name: HARBOR PARK APARTMENTS | Climate Zone # 3 | # of Stories 2

**Registration Number:** **Registration Date/Time:** **HERS Provider:** **March 2010**  
2008 Residential Compliance Forms

**Prescriptive Certificate of Compliance: Residential** **CF-1R**  
(Page 3 of 5)

**Newly Constructed Buildings and Additions Greater Than 1,000 ft<sup>2</sup>**  
Project Name: HARBOR PARK APARTMENTS | Climate Zone # 3 | # of Stories 2

**FENESTRATION: PROPOSED AREAS**

| Penetration Type and Frame | Orientation (North, East, South, West) | Proposed Area <sup>1</sup> (ft <sup>2</sup> ) | Maximum Allowed U-factor <sup>2</sup> | Maximum Allowed SHGC <sup>3,4</sup> | NFRC or Default Values <sup>5</sup> |
|----------------------------|----------------------------------------|-----------------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|
| FRONT                      | E                                      | 108                                           | .4                                    | NR                                  | .37                                 |
| REAR                       | S                                      | 48                                            | .4                                    | NR                                  | .37                                 |
| RIGHT                      | N                                      | 116L                                          | .4                                    | NR                                  | .37                                 |
| LEFT                       | W                                      | 81                                            | .4                                    | NR                                  | .37                                 |

**Total:** 353

1. Indicate the Mass Thickness from Reference Joint Appendix J4.

2. Indicate the Assembly Name or type: Roof/Ceiling, Walls, Floors, Ceilings, Space, Doors and etc...Indicate the Frame type and Size: For Window, Glass or Skylight.

3. Enter the Table number that closely resembles the proposed assembly.

4. Enter the row and column of the U-factor value.

5. Enter the Effective R-value listed in the J4 Table Number.

6. The Final Assembly U-factor value is the sum of the U-factor value from the Reference Joint Appendix J4 and the U-factor value from the J4 Table Number.

7. Insert the Final Assembly U-factor value back on to the Opaque Surface Details table in Column J.

**FENESTRATION PROPOSED AREA CALCULATION**

| CFA                                                                           | Allowable % of CFA | Allowed Area (CFA x Allowed %) | Total Proposed Area (from Table Above) |
|-------------------------------------------------------------------------------|--------------------|--------------------------------|----------------------------------------|
| Total Fenestration Area <sup>1</sup>                                          | 2255               | 20                             | 450.9                                  |
| West Fenestration Area <sup>1</sup> (Required only in Climate Zones 2 & 7-15) |                    | .05                            |                                        |
| Total Area                                                                    |                    |                                | 450.9                                  |
|                                                                               |                    |                                | ≥ 353.0                                |

1. For Component Package C, use Table 151-B of Climate Zone Maximum Total Area Allowance.

2. For all other packages enter 20% when no West orientation restriction or 15% when West fenestration is being installed in Climate Zones 2, 7-15.

3. The Proposed West Fenestration Area includes west-sloping skylight area and any other skylight area with a pitch less than 1:12.

4. To meet energy compliance the Total Proposed Area must be less than or equal to the Allowed Area.

**Documentation Author's Declaration Statement**

\* I certify that this Certificate of Compliance documentation is accurate and complete.

Name: JOSEPH OAKLEY | Signature: 

Company: OAKLEY & OAKLEY | Date: 9-19-2011

Address: 7700 EDGEWATER DRIVE, # 615 | License: C15457

City/State/Zip: CA 94621 | Phone: 510-562-6028

\* I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.

\* I certify that the energy, features and performance specifications for the building design identified on this Certificate of Compliance conform to the applicable codes, standards and laws of the state of California and the City and County of San Francisco.

\* The building design features identified on this Certificate of Compliance are consistent with the information provided to document this building design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for review and approval.

Name: JOSEPH OAKLEY | Signature: 

Company: OAKLEY & OAKLEY | Date: 9-19-2011

Address: 7700 EDGEWATER DRIVE, # 615 | License: C15457

City/State/Zip: CA 94621 | Phone: 510-562-6028

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300.

**Prescriptive Certificate of Compliance: Residential** **CF-1R**  
(Page 3 of 5)

**Newly Constructed Buildings and Additions Greater Than 1,000 ft<sup>2</sup>**  
Project Name: HARBOR PARK APARTMENTS | Climate Zone # 3 | # of Stories 2

**ROOFING PRODUCTS (COOL ROOFS) §151(j)12**

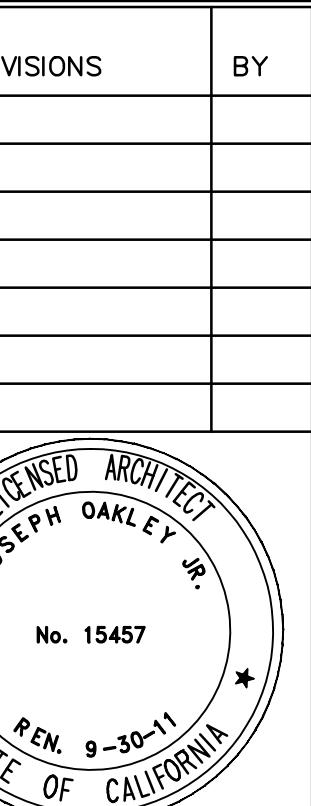
Check applicable box below if the newly installed roof is exempt from the roofing product "Cool Roof" requirements. Note: If any one of the boxes are checked below, the aged Solar Reflectance and Thermal Emittance requirements for roofing products in §118(g) are not applicable. Do not check both boxes.

Cool Roof Not Required in Climate Zones 12, 14, and 16 with a Low Sloped, Less or 2:12 pitch.

Cool Roof Not Required in Climate Zones 1 through 9 and 16 with a Steep-Sloped Roof (pitch greater than 2:12) and product unit weight less than 5lb/ft<sup>2</sup>.

**Other Exceptions**

Roof



COMMUNI | CEN | ER  
ARBOR PARK APARTMENTS  
69 PORTER STREET, VALLEJO, CA 94560  
DRAWING TITLE:

JUVENILE  
ARBORIST

An oval-shaped architectural stamp. The top arc contains the text "ARCHITECT" and the bottom arc contains "CALIFORNIA". The left side of the oval has the date "30-11" and the right side has a small star. The center of the oval contains the name "W. E. B. ACKLEY JR." and the number "6457".

700 E D G E W A T E R D R I V E, S T E. 615  
A K L A N D, C A 9 4 6 2 1  
1 0 . 5 6 2 . 6 0 2 8  
A X . 5 1 0 . 5 6 2 . 6 0 4 3

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125.0*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1          | 2             | 3    | 4                         | 5                    | 6                 | 7                          | 8                 | 9                   | 10                  | 11                  | 12                  | 13                   | 14   |                   |
|------------|---------------|------|---------------------------|----------------------|-------------------|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|------|-------------------|
| Tag/<br>ID | Assembly Type | Area | Orientation<br>N, S, W, E | Standard<br>U-Factor | Joint<br>U-Factor | Joint<br>Appendix<br>Table | Cavity<br>R-Value | Exterior<br>R-Value | Interior<br>R-Value | Exterior<br>Furring | Interior<br>Furring | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 1          | Slab          | 385  | N                         | .73                  | .074              | R-19                       | 4.7-1-A1          |                     |                     |                     |                     | New                  |      |                   |
| 2          | Wall          | 165  | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 3          | Wall          | 10   | SE                        | .074                 | .074              | R-19                       | 11                |                     |                     |                     |                     |                      |      |                   |
| 4          | Roof          | 385  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     |                      |      |                   |
| 5          | Slab          | 154  | N                         | .73                  | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 6          | Wall          | 114  | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 7          | Wall          | 102  | SE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     |                      |      |                   |
| 8          | Wall          | 30   | SW                        | .074                 | .074              | R-19                       | 4.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

**PERFORATION SURFACE DETAILS**

| 1          | 2                 | 3               | 4                         | 5           | 6               | 7                  | 8                        | 9        | 10                   | 11   | 12                |
|------------|-------------------|-----------------|---------------------------|-------------|-----------------|--------------------|--------------------------|----------|----------------------|------|-------------------|
| Tag/<br>ID | Fenestration Type | Surface<br>Area | Orientation<br>N, S, W, E | # of Panels | Max<br>U-Factor | U-Factor<br>Source | Max<br>(R)SHGC<br>Source | Overhang | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 1          | Window            | 155             | NE                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 2          | Window            | 94              | NE                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 3          | Window            | 90              | SE                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 4          | Window            | 28              | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 5          | Window            | 12              | NW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 6          | Window            | 9               | NE                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 7          | Window            | 420             | NE                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |

3.1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms

March 2010

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125.0*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1          | 2             | 3    | 4                         | 5                    | 6                 | 7                          | 8                 | 9                   | 10                  | 11                  | 12                  | 13                   | 14   |                   |
|------------|---------------|------|---------------------------|----------------------|-------------------|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|------|-------------------|
| Tag/<br>ID | Assembly Type | Area | Orientation<br>N, S, W, E | Standard<br>U-Factor | Joint<br>U-Factor | Joint<br>Appendix<br>Table | Cavity<br>R-Value | Exterior<br>R-Value | Interior<br>R-Value | Exterior<br>Furring | Interior<br>Furring | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 9          | Roof          | 158  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 10         | Slab          | 128  | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 11         | Wall          | 72   | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 12         | Wall          | 40   | SE                        | .074                 | .074              | R-19                       | 4.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 13         | Roof          | 128  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 14         | Roof          | 128  | N                         | .074                 | .074              | R-19                       | 9.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 15         | Slab          | 89   | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 16         | Wall          | 40   | NE                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 17         | Wall          | 124  | SW                        | .074                 | .074              | R-19                       | 4.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

**PERFORATION SURFACE DETAILS**

| 1          | 2                 | 3               | 4                         | 5           | 6               | 7                  | 8                        | 9        | 10                   | 11   | 12                |
|------------|-------------------|-----------------|---------------------------|-------------|-----------------|--------------------|--------------------------|----------|----------------------|------|-------------------|
| Tag/<br>ID | Fenestration Type | Surface<br>Area | Orientation<br>N, S, W, E | # of Panels | Max<br>U-Factor | U-Factor<br>Source | Max<br>(R)SHGC<br>Source | Overhang | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 9          | Window            | 4               | SW                        | 90          | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 10         | Window            | 4               | SW                        | 1           | 1               |                    |                          |          |                      |      |                   |
| 11         | Window            | 52              | SW                        | 1           | 1               |                    |                          |          |                      |      |                   |
| 12         | Window            | 4               | NE                        | 1           | 1               |                    |                          |          |                      |      |                   |
| 13         | Window            | 4               | NE                        | 1           | 1               |                    |                          |          |                      |      |                   |
| 14         | Window            | 4               | NE                        | 1           | 1               |                    |                          |          |                      |      |                   |
| 15         | Window            | 14              | NE                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |

3.1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms

March 2010

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file affidavit)

Front Orientation: N, E, S, W or in Degrees: *125.0*

**FIELD INSPECTION ENERGY CHECKLIST**

**OPAQUE SURFACE DETAILS**

| 1          | 2             | 3    | 4                         | 5                    | 6                 | 7                          | 8                 | 9                   | 10                  | 11                  | 12                  | 13                   | 14   |                   |
|------------|---------------|------|---------------------------|----------------------|-------------------|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------------------|------|-------------------|
| Tag/<br>ID | Assembly Type | Area | Orientation<br>N, S, W, E | Standard<br>U-Factor | Joint<br>U-Factor | Joint<br>Appendix<br>Table | Cavity<br>R-Value | Exterior<br>R-Value | Interior<br>R-Value | Exterior<br>Furring | Interior<br>Furring | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 17         | Roof          | 8    | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 18         | Slab          | 121  | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 19         | Wall          | 114  | SW                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 20         | Wall          | 40   | NW                        | .074                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 21         | Roof          | 121  | N                         | .074                 | .074              | R-19                       | 4.2-1-A16         |                     |                     |                     |                     | New                  |      |                   |
| 22         | Slab          | 206  | N                         | .730                 | .074              | R-19                       | 9.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 23         | Wall          | 40   | NE                        | .074                 | .074              | R-19                       | 4.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |
| 24         | Wall          | 124  | SE                        | .074                 | .074              | R-19                       | 4.3-1-A5          |                     |                     |                     |                     | New                  |      |                   |

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

**PERFORATION SURFACE DETAILS**

| 1          | 2                 | 3               | 4                         | 5           | 6               | 7                  | 8                        | 9        | 10                   | 11   | 12                |
|------------|-------------------|-----------------|---------------------------|-------------|-----------------|--------------------|--------------------------|----------|----------------------|------|-------------------|
| Tag/<br>ID | Fenestration Type | Surface<br>Area | Orientation<br>N, S, W, E | # of Panels | Max<br>U-Factor | U-Factor<br>Source | Max<br>(R)SHGC<br>Source | Overhang | Conditions<br>Status | Pass | Fail <sup>2</sup> |
| 17         | Window            | 66              | SN                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 18         | Window            | 4               | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 19         | Window            | 4               | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 20         | Window            | 4               | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 21         | Window            | 4               | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 22         | Window            | 4               | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |
| 23         | Window            | 152             | SW                        | 150         | NFRC            | 1.450              | NFRC                     |          | New                  |      |                   |

3.1. See Instructions in the Nonresidential Compliance Manual, page 3-96.  
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms

March 2010

**CERTIFICATE OF COMPLIANCE  
AND FIELD INSPECTION ENERGY CHECKLIST**  
ENV-1C  
(Page 1 of 4)

Project Name: *Community Building* Date: *1-14-2012* Climate Zone: *3*  
Project Address: *969 Porter St* Conditioned Floor Area: *2098*

**General Information**

Building Type:  Nonresidential  High-Rise Residential  Hotel/Motel Guest Room  
 Schools (Public School)  Relocatable Public School Bldg.  Conditioned Spaces  Unconditioned Spaces  
 Skylight Area for Large Enclosed Space  $\geq$  8000 ft<sup>2</sup> (If checked include the ENV-4C with submittal)

Phase of Construction:  New Construction  Addition  Alteration

Approach of Compliance:  Component  Overall Envelope TDV Energy  Unconditioned (file

CERTIFICATE OF COMPLIANCE

(Part 1 of 2)

MECH-1

PROJECT NAME

Community Building

DATE

1-14-2012

PROJECT ADDRESS

969 Porter Street

PRINCIPAL DESIGNER-MECHANICAL

Joseph Oakley

TELEPHONE

510-562-6028

Building Permit

DOCUMENTATION AUTHOR

Joseph Oakley

TELEPHONE

510-562-6020

Checked by/Date  
Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS

8/30/2011

BUILDING CONDITIONED FLOOR AREA

2175

CLIMATE ZONE

3

BUILDING TYPE

NONRESIDENTIAL

HIGH RISE RESIDENTIAL

HOTEL/MOTEL GUEST ROOM

PHASE OF CONSTRUCTION

NEW CONSTRUCTION

ADDITION

ALTERATION

UNCONDITIONED (file affidavit)

METHOD OF MECHANICAL COMPLIANCE

PRESCRIPTIVE

PERFORMANCE

PROOF OF ENVELOPE COMPLIANCE

PREVIOUS ENVELOPE PERMIT

ENVELOPE COMPLIANCE ATTACHED

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the building features and performance specifications need to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building mechanical requirements.

The documentation preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR

Joseph Oakley

SIGNATURE

Joseph Oakley

DATE

1-14-2012

The Principal Mechanical Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the mechanical requirements contained in the applicable parts of Sections 110 through 115, 120 through 124, 140 through 142, 144 and 145.

Please check one:

- I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer or mechanical engineer, or I am a licensed architect.
- I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code by Section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
- I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described pursuant to Business and Professions Code sections 5537, 5538, and 6737.1.

(These sections of the Business and Professions Code are printed in full in the Nonresidential Manual.)

PRINCIPAL MECHANICAL DESIGNER-NAME

Joseph Oakley

SIGNATURE

Joseph Oakley

DATE

1-14-2012

LIC. #

C15457

MECHANICAL MANDATORY MEASURES

Indicate location on plans of Note Block for Mandatory Measures

T24.2

INSTRUCTIONS TO APPLICANT

For Detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

MECH-1: Required on plans for all submittals. Part 2 may be incorporated in schedules on plans.

MECH-2: Required for all submittals, but may be incorporated in schedules on plans.

MECH-3: Required for all submittals unless required ventilation rates and airflows are shown on plans, see 4.3.4.

MECH-4: Required for all prescriptive submittals.

MECH-5: Optional. Performance use only for mechanical distribution summary.

| CERTIFICATE OF COMPLIANCE (Part 2 of 2) MECH-1                  |                    |                    |                                                                                                                    |
|-----------------------------------------------------------------|--------------------|--------------------|--------------------------------------------------------------------------------------------------------------------|
| PROJECT NAME<br>COMMUNITY BUILDING                              |                    | DATE<br>01-14-2012 |                                                                                                                    |
| SYSTEM FEATURES                                                 |                    |                    |                                                                                                                    |
| SYSTEM NAME                                                     | MECHANICAL SYSTEMS |                    |                                                                                                                    |
| TIME CONTROL                                                    | O                  |                    |                                                                                                                    |
| SETBACK CONTROL                                                 | B                  |                    |                                                                                                                    |
| ISOLATION ZONES                                                 | D                  |                    |                                                                                                                    |
| HEAT PUMP THERMOSTAT?                                           | Y                  |                    |                                                                                                                    |
| ELECTRIC HEAT?                                                  | N                  |                    |                                                                                                                    |
| FAN CONTROL                                                     | Const. Vol.        |                    |                                                                                                                    |
| VAV MINIMUM POSITION CONTROL?                                   | N                  |                    |                                                                                                                    |
| SIMULTANEOUS HEAT/COOL?                                         | N                  |                    |                                                                                                                    |
| HEAT AND COOL SUPPLY RESET?                                     | Y                  |                    |                                                                                                                    |
| HEAT REJECTION CONTROL                                          | N                  |                    |                                                                                                                    |
| VENTILATION                                                     | Y                  |                    |                                                                                                                    |
| OUTDOOR DAMPER CONTROL?                                         | N                  |                    |                                                                                                                    |
| ECONOMIZER TYPE                                                 | None               |                    |                                                                                                                    |
| DESIGN O.A. CFM (MECH-3, COLUMN H)                              | 343                |                    |                                                                                                                    |
| HEATING EQUIPMENT TYPE                                          | Heat Pump          |                    |                                                                                                                    |
| HIGH EFFICIENCY? IF YES ENTER EFF. #                            | Y 11.5             |                    |                                                                                                                    |
| MAKE AND MODEL NUMBER                                           |                    |                    |                                                                                                                    |
| COOLING EQUIPMENT TYPE                                          | Fan Coil/Heat Pump |                    |                                                                                                                    |
| HIGH EFFICIENCY? IF YES ENTER EFF. #                            | Y 11.5             |                    |                                                                                                                    |
| MAKE AND MODEL NUMBER                                           | Carrier FX4B030050 | FX3042080          | FX4B048010                                                                                                         |
| PIPE INSULATION REQUIRED?                                       | Y                  |                    |                                                                                                                    |
| PIPE/DUCT INSULATION PROTECTED?                                 | Y                  |                    |                                                                                                                    |
| HEATING DUCT LOCATION                                           | R-VALUE            | 8.0                |                                                                                                                    |
| COOLING DUCT LOCATION                                           | R-VALUE            | 8.0                |                                                                                                                    |
| VERIFIED SEALED DUCTS IN CEILING/ROOF SPACE                     | %FAN FLOW          |                    |                                                                                                                    |
| TABLE OF CODES: Enter code from table below into columns above. |                    |                    |                                                                                                                    |
|                                                                 | Y:Yes              | N:No               |                                                                                                                    |
| HEAT PUMP THERMOSTAT?                                           |                    |                    | TIME CONTROL<br>S: Prog. Switch<br>O: Occupancy Sensor<br>M: Manual Timer                                          |
| ELECTRIC HEAT?                                                  |                    | Y                  | SETBACK CTRL.<br>B: Both<br>C: Cooling<br>H: Heating                                                               |
| VAV MINIMUM POSITION CONTROL?                                   |                    | Y                  | ISOLATION ZONES<br>Enter number of Isolation Zones                                                                 |
| HEAT AND COOL SUPPLY RESET?                                     |                    | Y                  | FAN CONTROL<br>I: Inlet Vanes<br>P: Variable Pitch<br>V: VFD<br>O: Other<br>C: Curve                               |
| SIMULTANEOUS HEAT/COOL?                                         |                    | Y                  |                                                                                                                    |
| HIGH EFFICIENCY?                                                | Y                  |                    | VENTILATION<br>B: Air Balance<br>C: Outside Air Cert.<br>M: Outside Air Measure<br>D: Demand Control<br>N: Natural |
| PIPE INSULATION REQUIRED?                                       | Y                  |                    | OUTDOOR DAMPER<br>A: Auto<br>G: Gravity                                                                            |
| PIPE/DUCT INSULATION PROTECTED?                                 | Y                  |                    | ECONOMIZER<br>A: Air<br>W: Water<br>N: Not Required<br>EC: Economizer Control See Section 144(e)3                  |
| SEALED DUCTS IN CEILING/ROOF SPACE?                             | Y                  |                    | O.A. CFM<br>Enter Design Outdoor Air CFM.<br>Note: This shall be no less than Column H on MECH-3.                  |

# CERTIFICATE OF COMPLIANCE

(Part 2 of 2) MECH-1

PROJECT NAME  
COMMUNITY BUILDING

DATE  
01-14-2012

## SYSTEM FEATURES

| SYSTEM NAME                                 | MECHANICAL SYSTEMS |           |            |  | NOTE TO FIELD<br>Bldg. Dept. Use |
|---------------------------------------------|--------------------|-----------|------------|--|----------------------------------|
| TIME CONTROL                                | O                  |           |            |  |                                  |
| SETBACK CONTROL                             | B                  |           |            |  |                                  |
| ISOLATION ZONES                             | D                  |           |            |  |                                  |
| HEAT PUMP THERMOSTAT?                       | Y                  |           |            |  |                                  |
| ELECTRIC HEAT?                              | N                  |           |            |  |                                  |
| FAN CONTROL                                 | Concl. Vol.        |           |            |  |                                  |
| VAV MINIMUM POSITION CONTROL?               | N                  |           |            |  |                                  |
| SIMULTANEOUS HEAT/COOL?                     | N                  |           |            |  |                                  |
| HEAT AND COOL SUPPLY RESET?                 | Y                  |           |            |  |                                  |
| HEAT REJECTION CONTROL                      | N                  |           |            |  |                                  |
| VENTILATION                                 | Y                  |           |            |  |                                  |
| OUTDOOR DAMPER CONTROL?                     | N                  |           |            |  |                                  |
| ECONOMIZER TYPE                             | None               |           |            |  |                                  |
| DESIGN O.A. CFM (MECH-3, COLUMN H)          | 343                |           |            |  |                                  |
| HEATING EQUIPMENT TYPE                      | Heat Pump          |           |            |  |                                  |
| HIGH EFFICIENCY? IF YES ENTER EFF. #        | Y 11.5             |           |            |  |                                  |
| MAKE AND MODEL NUMBER                       |                    |           |            |  |                                  |
| COOLING EQUIPMENT TYPE                      | Fan Coil/Heat Pump |           |            |  |                                  |
| HIGH EFFICIENCY? IF YES ENTER EFF. #        | Y 11.5             |           |            |  |                                  |
| MAKE AND MODEL NUMBER                       | Carrier FX4B030050 | FX3042080 | FX4B048010 |  |                                  |
| PIPE INSULATION REQUIRED?                   | Y                  |           |            |  |                                  |
| PIPE/DUCT INSULATION PROTECTED?             | Y                  |           |            |  |                                  |
| HEATING DUCT LOCATION                       | R-VALUE            | 8.0       |            |  |                                  |
| COOLING DUCT LOCATION                       | R-VALUE            | 8.0       |            |  |                                  |
| VERIFIED SEALED DUCTS IN CEILING/ROOF SPACE | %FAN FLOW          |           |            |  |                                  |

TABLE OF CODES: Enter code from table below into columns above.

|                                     | Y:Yes | N:No | TIME CONTROL                                                                                        | SETBACK CTRL.                       | ISOLATION ZONES                                                                     | FAN CONTROL                                                                           |
|-------------------------------------|-------|------|-----------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| HEAT PUMP THERMOSTAT?               |       |      | S: Prog. Switch<br>O: Occupancy Sensor<br>M: Manual Timer                                           | B: Both<br>C: Cooling<br>H: Heating | Enter number of Isolation Zones                                                     | I: Inlet Vanes<br>P: Variable Pitch<br>V: VFD<br>O: Other<br>C: Curve                 |
| ELECTRIC HEAT?                      |       | N    |                                                                                                     |                                     |                                                                                     |                                                                                       |
| VAV MINIMUM POSITION CONTROL?       |       | N    |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HEAT AND COOL SUPPLY RESET?         |       | Y    |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SIMULTANEOUS HEAT/COOL?             |       | N    |                                                                                                     |                                     |                                                                                     |                                                                                       |
| HIGH EFFICIENCY?                    | Y     |      |                                                                                                     |                                     |                                                                                     |                                                                                       |
| PIPE INSULATION REQUIRED?           | Y     |      |                                                                                                     |                                     |                                                                                     |                                                                                       |
| PIPE/DUCT INSULATION PROTECTED?     | Y     |      |                                                                                                     |                                     |                                                                                     |                                                                                       |
| SEALED DUCTS IN CEILING/ROOF SPACE? | Y     |      |                                                                                                     |                                     |                                                                                     |                                                                                       |
|                                     |       |      | VENTILATION                                                                                         | OUTDOOR DAMPER                      | ECONOMIZER                                                                          | O.A. CFM                                                                              |
|                                     |       |      | B: Air Balance<br>C: Outside Air Cert.<br>M: Outside Air Measure<br>D: Demand Control<br>N: Natural | A: Auto<br>G: Gravity               | A: Air<br>W: Water<br>N: Not Required<br>EC: Economizer Control See Section 144(e)3 | Enter Design Outdoor Air CFM.<br>Note: This shall be no less than Column H on MECH-3. |

Nonresidential Compliance Forms

August 2001

| <b>WATER SIDE SYSTEM REQUIREMENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |                                                                                  |  |                  |  | (Part 2 of 3) <b>MECH-2C</b> |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------|--|------------------|--|------------------------------|--|
| PROJECT NAME: COMMUNITY BUILDING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |                                                                                  |  | DATE: 01-14-2012 |  |                              |  |
| Item or System Tags<br>(i.e. AC-1, RTU-1, HP-1, CT-1, etc...) <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No. of Systems | <b>WATER<sup>2</sup> SIDE SYSTEMS: Chillers, Towers, Boilers, Hydronic Loops</b> |  |                  |  |                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                                                                                  |  |                  |  |                              |  |
| <b>MANDATORY MEASURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |                                                                                  |  |                  |  |                              |  |
| Equipment Efficiency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                | <i>Indicate Page Reference on Plans or Specification<sup>2</sup></i>             |  |                  |  |                              |  |
| Pipe Insulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                                                                                  |  |                  |  |                              |  |
| <b>PRESCRIPTIVE MEASURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |                                                                                  |  |                  |  |                              |  |
| Cooling Tower Fan Controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 144(h)         |                                                                                  |  |                  |  |                              |  |
| Cooling Tower Flow Controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 144(h)         |                                                                                  |  |                  |  |                              |  |
| Variable Flow System Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 144(j)         |                                                                                  |  |                  |  |                              |  |
| Chiller and Boiler Isolation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 144(j)         |                                                                                  |  |                  |  |                              |  |
| CHW and HHW Reset Controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 144(j)         |                                                                                  |  |                  |  |                              |  |
| WLHP Isolation Valves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 144(j)         |                                                                                  |  |                  |  |                              |  |
| VSD on CHW, CW & WLHP Pumps >5HP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 144(j)         |                                                                                  |  |                  |  |                              |  |
| DP Sensor Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 144(j)         |                                                                                  |  |                  |  |                              |  |
| <ol style="list-style-type: none"> <li>1. The Proposed equipment need to match the building plans schedule or specifications. If a requirement is not applicable, put "N/A" in the column next to applicable section.</li> <li>2. For each chiller, cooling tower, boiler, and hydronic loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column next to applicable section.</li> </ol> |                |                                                                                  |  |                  |  |                              |  |

| <b>SERVICE HOT WATER &amp; POOL/SPA REQUIREMENTS</b>               |                                                                 |                  |          |  |  | <b>(Part 3 of 3)</b> | <b>MECH-2C</b> |
|--------------------------------------------------------------------|-----------------------------------------------------------------|------------------|----------|--|--|----------------------|----------------|
| <b>PROJECT NAME:</b> COMMUNITY BUILDING                            |                                                                 |                  |          |  |  | <b>DATE:</b>         | 01-14-2012     |
| Item or System Tags<br>(i.e. WH-1, WHP, DHW, etc... ) <sup>1</sup> | <i>Service Hot Water, Pool Heating</i>                          |                  |          |  |  |                      |                |
|                                                                    |                                                                 |                  |          |  |  |                      |                |
| No. of Systems                                                     |                                                                 |                  |          |  |  |                      |                |
|                                                                    |                                                                 |                  |          |  |  |                      |                |
| <b>MANDATORY MEASURES</b>                                          | <i>Indicate Page Reference on Plans or Schedule<sup>2</sup></i> |                  |          |  |  |                      |                |
|                                                                    | <b>T-24 Section</b>                                             |                  |          |  |  |                      |                |
| <b>SERVICE HOT WATER</b>                                           |                                                                 |                  |          |  |  |                      |                |
| Certified Water Heater                                             | §111, §113 (a)                                                  | STATE INDUSTRIES | GSG40Y0C |  |  |                      |                |
| Water Heater Efficiency                                            | §113 (b)                                                        | .62EF            |          |  |  |                      |                |
| Service Water Heating Installation                                 | §113 (c)                                                        |                  |          |  |  |                      |                |
| Pipe Insulation                                                    | §123                                                            |                  |          |  |  |                      |                |
| <b>POOL AND SPA</b>                                                |                                                                 |                  |          |  |  |                      |                |
| Pool and Spa Efficiency and Control                                | §114 (a)                                                        |                  |          |  |  |                      |                |
| Pool and Spa Electric Resisting Heating                            | §114 (b)                                                        |                  |          |  |  |                      |                |
| Exception                                                          |                                                                 |                  |          |  |  |                      |                |
| Pool and Spa Installation                                          | §114 (b)                                                        |                  |          |  |  |                      |                |
| Pool Heater – No Pilot Light                                       | §115 (c)                                                        |                  |          |  |  |                      |                |
| Spa Heater – No Pilot Light                                        | §115 (d)                                                        |                  |          |  |  |                      |                |
| Pipe Insulation                                                    | §123                                                            |                  |          |  |  |                      |                |

| MECHANICAL VENTILATION AND REHEAT  |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          | MECH-3C                              |                 |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------|------------------|----------------------|------------------------------------|-----------------------------------|----------------------------------|-------------------------------------------|--------------------------------|------------------------------------------|--------------------------------------|-----------------|
| PROJECT NAME<br>COMMUNITY BUILDING |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                | DATE<br>01-14-2012                       |                                      |                 |
| MECHANICAL VENTILATION §121(b)2    |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  |                      |                                    |                                   |                                  | REHEAT LIMITATION §144(d)                 |                                |                                          |                                      |                 |
| AREA BASIS                         |                                                                                                                                                                                                                                                                                                                      |                               |                                | OCCUPANCY BASIS  |                      |                                    | VAV Minimum                       |                                  |                                           |                                |                                          |                                      |                 |
| A                                  | B                                                                                                                                                                                                                                                                                                                    | C                             | D                              | E                | F                    | G                                  | H                                 | I                                | J                                         | K                              | L                                        | M                                    | N               |
| Zone/<br>System                    | Condition<br>Area<br>(ft <sup>2</sup> )                                                                                                                                                                                                                                                                              | CFM<br>per<br>ft <sup>2</sup> | Min<br>CFM by<br>Area<br>B x C | Num of<br>People | CFM<br>per<br>Person | Min<br>CFM by<br>Occupant<br>E x F | REQ'D<br>V.A.<br>Max of<br>D or G | Design<br>Ventilation Air<br>cfm | 50% of<br>Design<br>Zone<br>Supply<br>cfm | B x 0.4<br>cfm/ft <sup>2</sup> | Max of<br>Columns<br>H, J, K,<br>300 cfm | Design<br>minimum<br>Air<br>setpoint | Transfer<br>Air |
| PZ                                 | 385                                                                                                                                                                                                                                                                                                                  | 0.15                          | 58                             | 7.7              | 15                   | 115                                | 115                               | 115                              |                                           |                                |                                          |                                      |                 |
| FC1/Hp1                            |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  | 15                   |                                    | 115                               | 115                              |                                           |                                |                                          |                                      |                 |
| Office                             | 501                                                                                                                                                                                                                                                                                                                  | 0.15                          | 75                             | 5.0              | 15                   | 75                                 | 75                                | 75                               |                                           |                                |                                          |                                      |                 |
| Entry                              | 206                                                                                                                                                                                                                                                                                                                  | 0.15                          | 40                             | 2.7              | 15                   | 40                                 | 40                                | 40                               |                                           |                                |                                          |                                      |                 |
| FC2/Hp2                            |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  | 15                   |                                    | 115                               | 115                              |                                           |                                |                                          |                                      |                 |
| RL2me                              | 277                                                                                                                                                                                                                                                                                                                  | 0.15                          | 41                             | 2.8              | 15                   | 41                                 | 41                                | 41                               |                                           |                                |                                          |                                      |                 |
| G.R                                | 574                                                                                                                                                                                                                                                                                                                  | 0.50                          | 207                            | 19.1             | 15                   | 287                                | 287                               | 287                              |                                           |                                |                                          |                                      |                 |
| K.t.                               | 95                                                                                                                                                                                                                                                                                                                   | 0.15                          | 14                             | 2.0              | 15                   | 14                                 | 14                                | 14                               |                                           |                                |                                          |                                      |                 |
| FC-3/Hp3                           |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  | 15                   |                                    | 343                               | 343                              |                                           |                                |                                          |                                      |                 |
|                                    |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  | 15                   |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
|                                    |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  | 15                   |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
|                                    |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  | 15                   |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| Totals                             |                                                                                                                                                                                                                                                                                                                      |                               |                                |                  |                      |                                    |                                   | 343                              | Column I Total Design Ventilation Air     |                                |                                          |                                      |                 |
| C                                  | Minimum ventilation rate per Section §121, Table 121-A.                                                                                                                                                                                                                                                              |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| E                                  | Based on fixed seat or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating.                                                                                                                                                        |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| H                                  | Required Ventilation Air (REQ'D V.A.) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column D or G).                                                                                                                                                                         |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| I                                  | Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference.                                                                                                                                                                                                                        |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| J                                  | Design fan supply cfm (Fan CFM) x 50%; or the design zone outdoor airflow rate per §121.                                                                                                                                                                                                                             |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| K                                  | Condition area (ft <sup>2</sup> ) x 0.4 cfm/ft <sup>2</sup> ; or                                                                                                                                                                                                                                                     |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| L                                  | Maximum of Columns H, J, K, or 300 cfm                                                                                                                                                                                                                                                                               |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| M                                  | This must be less than or equal to Column L and greater than or equal to the sum of Columns H plus N.                                                                                                                                                                                                                |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |
| N                                  | Transfer Air must be provided where the Required Ventilation Air (Column H) is greater than the Design Minimum Air (Column M). Where required, transfer air must be greater than or equal to the difference between the Required Ventilation Air (Column H) and the Design Minimum Air (Column M), Column H minus M. |                               |                                |                  |                      |                                    |                                   |                                  |                                           |                                |                                          |                                      |                 |

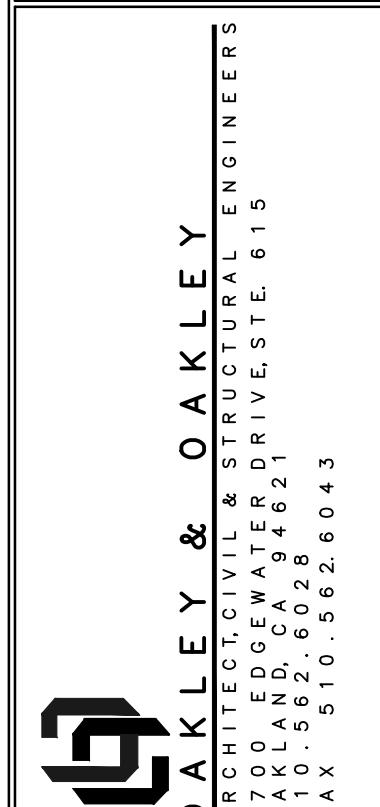
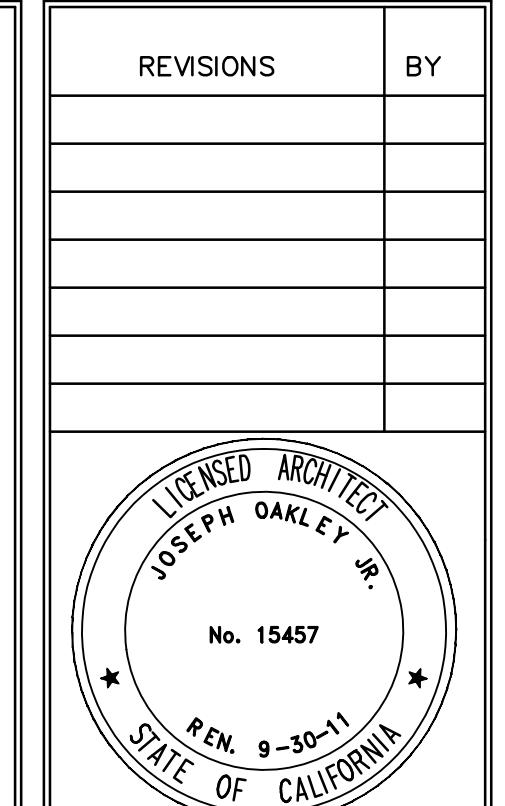
| <b>CERTIFICATE OF COMPLIANCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            |                            | (Page 1 of 4) <b>LTG-1C</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------|-----------------------------|
| Project Name:<br><i>Community Bldg</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            | Date: <b>01-14-2012</b>    |                             |
| Project Address:<br><i>969 Porter Street</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            | Climate Zone:<br><b>3</b>  | Building CFA : <i>2200</i>  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                            | Unconditioned Floor Area : |                             |
| <b>General Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                            |                             |
| Building Type: <input checked="" type="checkbox"/> Nonresidential <input type="checkbox"/> High-Rise Residential <input type="checkbox"/> Hotel/Motel<br><input type="checkbox"/> Schools <input type="checkbox"/> Relocatable Public Schools <input type="checkbox"/> Conditioned Spaces <input type="checkbox"/> Unconditioned Spaces<br>Phase of Construction: <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Addition <input type="checkbox"/> Alteration<br>Method of Compliance: <input type="checkbox"/> Complete Building <input checked="" type="checkbox"/> Area Category <input type="checkbox"/> Tailored                                                                        |                                                                            |                            |                             |
| <b>Documentation Author's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                            |                            |                             |
| <ul style="list-style-type: none"> <li>I certify that this Certificate of Compliance documentation is accurate and complete.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            |                            |                             |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Signature: <i>Joseph Oakley</i>                                            |                            |                             |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date: <i>1-14-2012</i>                                                     |                            |                             |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | If applicable:<br>CEA #<br>CEPE #                                          |                            |                             |
| City/State/Zip<br><i>Oakland, CA 94624</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Phone: <i>510-562-6020</i>                                                 |                            |                             |
| <b>Principal Lighting Designer's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                            |                             |
| <ul style="list-style-type: none"> <li>I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.</li> <li>This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.</li> <li>The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.</li> </ul> |                                                                            |                            |                             |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Signature: <i>Joseph Oakley</i>                                            |                            |                             |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Phone: <i>510-562-6020</i>                                                 |                            |                             |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | License # <i>C15457</i>                                                    |                            |                             |
| City/State/Zip:<br><i>Oakland, CA 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Date: <i>1-14-2012</i>                                                     |                            |                             |
| <b>Lighting Mandatory Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            |                            |                             |
| Indicate location on building plans of Mandatory Measures Note Block: <i>T24, 3</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                            |                            |                             |
| <b>LIGHTING COMPLIANCE FORMS &amp; WORKSHEETS (check box if worksheet is included)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            |                            |                             |
| For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                            |                            |                             |
| <input checked="" type="checkbox"/> LTG-1C Pages 1 through 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Certificate of Compliance. All Pages required on plans for all submittals. |                            |                             |
| <input type="checkbox"/> LTG-2C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Lighting Controls Credit Worksheet                                         |                            |                             |
| <input type="checkbox"/> LTG-3C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Indoor Lighting Power Allowance                                            |                            |                             |
| <input type="checkbox"/> LTG-4C Pages 1 through 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tailored Method Worksheet                                                  |                            |                             |
| <input type="checkbox"/> LTG-5C Pages 1 and 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Line Voltage Track Lighting Worksheet                                      |                            |                             |

| CERTIFICATE OF COMPLIANCE                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 | (Page 2 of 4) LTG-1C                     |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------|-------------------------------------|----------------------------|-------------------------------------------------|------------------------------------------|-------------------------------|
| INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 |                                          |                               |
| Project Name: <i>Community Building</i>                                                                                                                                                                                                                                                                                               |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 | Date: <i>1-14-2012</i>                   |                               |
| Installation Certificate, LTG-1-INST (Retain a copy and verify form is completed and signed.)                                                                                                                                                                                                                                         |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 | <input type="checkbox"/> Field Inspector |                               |
| Certificates of Acceptance, LTG-2A and LTG-3A (Retain a copy and verify form is completed and signed.)                                                                                                                                                                                                                                |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 | <input type="checkbox"/> Field Inspector |                               |
| A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces Installed Lighting Power listed on this Lighting Schedule is only for: <input type="checkbox"/> CONDITIONED SPACE <input type="checkbox"/> UNCONDITIONED SPACE                                                                               |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 |                                          |                               |
| <input type="checkbox"/> The actual indoor lighting power listed below includes all installed permanent and portable lighting systems in accordance with §146(a)                                                                                                                                                                      |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 |                                          |                               |
| <input type="checkbox"/> Only for offices: Up to the first 0.2 watts per square foot of portable lighting shall not be required to be included in the calculation of actual indoor lighting power density in accordance with the Exception to §146(a). All portable lighting in excess of 0.2 watts per square foot is totaled below. |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 |                                          |                               |
| A<br>Name or Item Tag                                                                                                                                                                                                                                                                                                                 | Luminaire Schedule (Type, Lamps, Ballasts)                                                                                                                                  |                                  |                                                                  | Installed Watts                     |                            |                                                 |                                          |                               |
|                                                                                                                                                                                                                                                                                                                                       | B                                                                                                                                                                           | C                                | D                                                                | E                                   | F                          | G                                               | H                                        |                               |
| Complete Luminaire Description<br>(i.e. 3 lamp fluorescent troffer,<br>F32T8, one dimmable electronic ballast)                                                                                                                                                                                                                        | <i>2 Lamp Fluorescent Troffer 32W T8 ER</i><br><i>3 Lamp Fluorescent Troffer 32W T8 ER</i><br><i>6" Fluorescent downlight 26W R7</i><br><i>RD</i><br><i>RJ</i><br><i>RK</i> | 62<br>93<br>28<br>46<br>32<br>62 | Watts per Luminaire <sup>1</sup>                                 | How wattage was determined          |                            | Number of Luminaires<br>Installed Watts (D x F) | Field Inspector <sup>2</sup>             |                               |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | CEC Default from NA8                | According to §130 (d or e) |                                                 | Pass                                     | Fail                          |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |                                                 | <input type="checkbox"/>                 | <input type="checkbox"/>      |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |                                                 | <input type="checkbox"/>                 | <input type="checkbox"/>      |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |                                                 | <input type="checkbox"/>                 | <input type="checkbox"/>      |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |                                                 | <input type="checkbox"/>                 | <input type="checkbox"/>      |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |                                                 | <input type="checkbox"/>                 | <input type="checkbox"/>      |
|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                             |                                  |                                                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>   |                                                 | <input type="checkbox"/>                 | <input type="checkbox"/>      |
| INSTALLED WATTS PAGE TOTAL: <i>1967</i>                                                                                                                                                                                                                                                                                               |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 |                                          |                               |
| Building total number of pages <input type="text" value="1"/>                                                                                                                                                                                                                                                                         |                                                                                                                                                                             |                                  | Installed Watts Building Total<br>(Sum of all pages) <i>1967</i> |                                     |                            |                                                 |                                          | Enter into LTG-1C Page 4 of 4 |
| 1. Wattage shall be determined according to Section 130(d and e). Wattage shall be rating of light fixture, not rating of bulb.<br>2. If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.                                                    |                                                                                                                                                                             |                                  |                                                                  |                                     |                            |                                                 |                                          |                               |

2008 Nonresidential Compliance Forms

July 2010

| <b>CERTIFICATE OF COMPLIANCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                    |                            | (Page 1 of 4) <b>LTG-1C</b>   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------|-------------------------------|
| Project Name:<br><i>Community Bldg</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                    | Date:<br><b>01-14-2012</b> |                               |
| Project Address:<br><i>969 Porter Street</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    | Climate Zone:<br><b>3</b>  | Building CFA :<br><i>2200</i> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                    |                            | Unconditioned Floor Area :    |
| <b>General Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                    |                            |                               |
| Building Type: <input checked="" type="checkbox"/> Nonresidential <input type="checkbox"/> High-Rise Residential <input type="checkbox"/> Hotel/Motel<br><input type="checkbox"/> Schools <input type="checkbox"/> Relocatable Public Schools <input type="checkbox"/> Conditioned Spaces <input type="checkbox"/> Unconditioned Spaces<br>Phase of Construction: <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Addition <input type="checkbox"/> Alteration<br>Method of Compliance: <input type="checkbox"/> Complete Building <input checked="" type="checkbox"/> Area Category <input type="checkbox"/> Tailored                                                                        |                                    |                            |                               |
| <b>Documentation Author's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                    |                            |                               |
| <ul style="list-style-type: none"> <li>I certify that this Certificate of Compliance documentation is accurate and complete.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                    |                            |                               |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Signature:<br><i>Joseph Oakley</i> |                            |                               |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date :<br><i>1-14-2012</i>         |                            |                               |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | If applicable:<br>CEA #<br>CEPE #  |                            |                               |
| City/State/Zip<br><i>Oakland, Ca. 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Phone:<br><i>510-562-6020</i>      |                            |                               |
| <b>Principal Lighting Designer's Declaration Statement</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                    |                            |                               |
| <ul style="list-style-type: none"> <li>I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.</li> <li>This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.</li> <li>The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.</li> </ul> |                                    |                            |                               |
| Name:<br><i>Joseph Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Signature:<br><i>Joseph Oakley</i> |                            |                               |
| Company:<br><i>Oakley &amp; Oakley</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Phone:<br><i>510-562-6020</i>      |                            |                               |
| Address:<br><i>7700 Edgewater Drive</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | License #<br><i>C15457</i>         |                            |                               |
| City/State/Zip:<br><i>Oakland, Ca. 94621</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Date:<br><i>1-14-2012</i>          |                            |                               |
| <b>Lighting Mandatory Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                    |                            |                               |
| Indicate location on building plans of Mandatory Measures Note Block: <u><i>T24, 3</i></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                    |                            |                               |
| <b>LIGHTING COMPLIANCE FORMS &amp; WORKSHEETS (check box if worksheet is included)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                    |                            |                               |
| For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                    |                            |                               |
| <input checked="" type="checkbox"/> LTG-1C Pages 1 through 4      Certificate of Compliance. All Pages required on plans for all submittals.<br><input type="checkbox"/> LTG-2C      Lighting Controls Credit Worksheet<br><input type="checkbox"/> LTG-3C      Indoor Lighting Power Allowance<br><input type="checkbox"/> LTG-4C Pages 1 through 4      Tailored Method Worksheet<br><input type="checkbox"/> LTG-5C Pages 1 and 2      Line Voltage Track Lighting Worksheet                                                                                                                                                                                                                                             |                                    |                            |                               |



PROJECT TITLE: COMMUNITY CENTER  
ARBOR PARK APARTMENTS  
69 PORTER STREET, VALLEJO, CA 94560  
DRAWING TITLE:

**PROJECT TITLE:**

|          |            |
|----------|------------|
| Date:    | 08/30/2011 |
| Scale:   | AS NOTED   |
| Drawn:   | STAFF      |
| Checked: | RY         |
| Job No.: | 2011-09    |
| Sheet:   |            |

# T24.4