PROJECT FRUITVALE COMMONS, OAKLAND CA.

## POWER DISTRIBUTION LOAD CALCULATIONS

CALCULATED BY : N. THEOPHANOUS

DATE: 5/8/2008

**UNIT A** AREA: = 700 S.F. EACH

NUMBER OF RESIDENTIAL UNITS = 15

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | GENERAL LIGHTING AND RECEPTACLES | | | | | | |
| | DEMAND LOAD PER NEC TABLE 220-3(b) | | | | | | |
| | 3 VOLT-AMPERES / SQ.FT. | | | | | | |
| | AREA = 700 | | | | | | |
| | VA/SQ FT X 3 | = | 2,100 | VA | | | |
| | SMALL APPLIANCES CIRCUIT | | | | | | |
| | DEMAND LOAD PER NEC 220-16(A) | = | 3,000 | VA | | | |
| | SUB-TOTAL CONNECTED LOAD | = | 5,100 | VA | | | |
| | DEMAND LOAD PER NEC TABLE 220-11 | | | | | | |
| | FIRST 3,000 VA @ 100% | = | 3,000 | VA | | | |
| | FROM 3 KVA TO 120 KVA @ 35% | = | 735 | VA | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **3,735** | **VA** |
| 2 | LARGEST MECHANICAL UNIT | | | | | | |
| | WALL HEATERS | | | | | | |
| | CONNECTED LOAD | = | 3,500 | VA | | | |
| | DEMAND LOAD @ 100% | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **3,500** | **VA** |
| 3 | FIXED APPLIANCES | | | | | | |
| | (NEC 220.17) | | | | | | |
| | CONNECTED LOAD | | | | | | |
| a) | DISHWASHER | = | 1,200 | VA | | | |
| b) | GARBAGE DISPOSAL | = | 900 | VA | | | |
| | TOTAL CONNECTED LOAD | = | 2,100 | VA | | | |
| | DEMAND LOAD @ 75% | = | 1,575 | VA | | | |
| | (NEC 220.17) | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **1,575** | **VA** |
| 4 | COOKING EQUIPMENT(TABLE 220-19) | | 9,600 | VA | = | **9,600** | **VA** |
| 5 | **TOTAL CONNECTED LOAD** | | **20,300** | **VA** | | | |
| 6 | **TOTAL DEMAND LOAD** | | | | = | **18,410** | **VA** |
| 7 | TOTAL AMPS OF DEMAND LOAD @ 208V | | | | = | **88.5** | **AMPS** |

**USE 125A. 120/208V., 2-PHASE, 3 WIRE PANEL WITH 100A MAIN BREAKER**

**UNIT B** AREA: = 750 S.F. EACH

NUMBER OF RESIDENTIAL UNITS = 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | GENERAL LIGHTING AND RECEPTACLES | | | | | | |
| | DEMAND LOAD PER NEC TABLE 220-3(b) | | | | | | |
| | 3 VOLT-AMPERES / SQ.FT. | | | | | | |
| | AREA = 750 | | | | | | |
| | VA/SQ FT X 3 | = | 2,250 | VA | | | |
| | SMALL APPLIANCES CIRCUIT | | | | | | |
| | DEMAND LOAD PER NEC 220-16(A) | = | 3,000 | VA | | | |
| | SUB-TOTAL CONNECTED LOAD | = | 5,250 | VA | | | |
| | DEMAND LOAD PER NEC TABLE 220-11 | | | | | | |
| | FIRST 3,000 VA @ 100% | = | 3,000 | VA | | | |
| | FROM 3 KVA TO 120 KVA @ 35% | = | 788 | VA | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **3,788** | **VA** |
| 2 | LARGEST MECHANICAL UNIT | | | | | | |
| | WALL HEATERS | | | | | | |
| | CONNECTED LOAD | = | 3,500 | VA | | | |
| | DEMAND LOAD @ 100% | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **3,500** | **VA** |
| 3 | FIXED APPLIANCES | | | | | | |
| | (NEC 220.17) | | | | | | |
| | CONNECTED LOAD | | | | | | |
| a) | DISHWASHER | = | 1,200 | VA | | | |
| b) | GARBAGE DISPOSAL | = | 900 | VA | | | |
| | TOTAL CONNECTED LOAD | = | 2,100 | VA | | | |
| | DEMAND LOAD @ 75% | = | 1,575 | VA | | | |
| | (NEC 220.17) | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **1,575** | **VA** |
| 4 | COOKING EQUIPMENT(TABLE 220-19) | | 9,600 | VA | = | **9,600** | **VA** |
| 5 | **TOTAL CONNECTED LOAD** | | **20,450** | **VA** | | | |
| 6 | **TOTAL DEMAND LOAD** | | | | = | **18,463** | **VA** |
| 7 | TOTAL AMPS OF DEMAND LOAD @ 208V | | | | = | **88.8** | **AMPS** |

**USE 125A. 120/208V., 2-PHASE, 3 WIRE PANEL WITH 100A MAIN BREAKER**

**UNIT C D F G** AREA: = 900 S.F. EACH

NUMBER OF RESIDENTIAL UNITS = 9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | GENERAL LIGHTING AND RECEPTACLES | | | | | | |
| | DEMAND LOAD PER NEC TABLE 220-3(b) | | | | | | |
| | 3 VOLT-AMPERES / SQ.FT. | | | | | | |
| | AREA = 900 | | | | | | |
| | VA/SQ FT X 3 | = | 2,700 | VA | | | |
| | SMALL APPLIANCES CIRCUIT | | | | | | |
| | DEMAND LOAD PER NEC 220-16(A) | = | 3,000 | VA | | | |
| | SUB-TOTAL CONNECTED LOAD | = | 5,700 | VA | | | |
| | DEMAND LOAD PER NEC TABLE 220-11 | | | | | | |
| | FIRST 3,000 VA @ 100% | = | 3,000 | VA | | | |
| | FROM 3 KVA TO 120 KVA @ 35% | = | 945 | VA | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **3,945** | **VA** |
| 2 | LARGEST MECHANICAL UNIT | | | | | | |
| | WALL HEATERS | | | | | | |
| | CONNECTED LOAD | = | 4,500 | VA | | | |
| | DEMAND LOAD @ 100% | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **4,500** | **VA** |
| 3 | APPLIANCES FASTENED IN PLACE | | | | | | |
| | (NEC 220.17) | | | | | | |
| | CONNECTED LOAD | | | | | | |
| a) | DISHWASHER | = | 1,200 | VA | | | |
| b) | GARBAGE DISPOSAL | = | 900 | VA | | | |
| | TOTAL CONNECTED LOAD | = | 2,100 | VA | | | |
| | DEMAND LOAD @ 75% | = | 1,575 | VA | | | |
| | (NEC 220.17) | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **1,575** | **VA** |
| 4 | COOKING EQUIPMENT(TABLE 220-19) | | 9,600 | VA | = | **9,600** | **VA** |
| 5 | **TOTAL CONNECTED LOAD** | | **21,900** | **VA** | | | |
| 6 | **TOTAL DEMAND LOAD** | | | | = | **19,620** | **VA** |
| 7 | TOTAL AMPS OF DEMAND LOAD @ 208V | | | | = | **94.3** | **AMPS** |

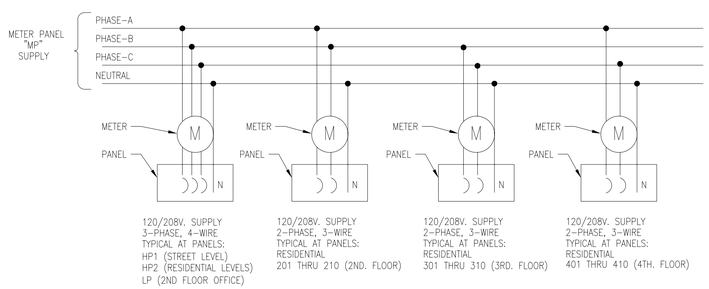
**USE 125A. 120/208V., 2-PHASE, 3 WIRE PANEL WITH 100A MAIN BREAKER**

**UNIT E** AREA: = 1036 S.F. EACH

NUMBER OF RESIDENTIAL UNITS = 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | GENERAL LIGHTING AND RECEPTACLES | | | | | | |
| | DEMAND LOAD PER NEC TABLE 220-3(b) | | | | | | |
| | 3 VOLT-AMPERES / SQ.FT. | | | | | | |
| | AREA = 1036 | | | | | | |
| | VA/SQ FT X 3 | = | 3,108 | VA | | | |
| | SMALL APPLIANCES CIRCUIT | | | | | | |
| | DEMAND LOAD PER NEC 220-16(A) | = | 3,000 | VA | | | |
| | SUB-TOTAL CONNECTED LOAD | = | 6,108 | VA | | | |
| | DEMAND LOAD PER NEC TABLE 220-11 | | | | | | |
| | FIRST 3,000 VA @ 100% | = | 3,000 | VA | | | |
| | FROM 3 KVA TO 120 KVA @ 35% | = | 1,088 | VA | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **4,088** | **VA** |
| 2 | LARGEST MECHANICAL UNIT | | | | | | |
| | WALL HEATERS | | | | | | |
| | CONNECTED LOAD | = | 4,500 | VA | | | |
| | DEMAND LOAD @ 100% | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **4,500** | **VA** |
| 3 | APPLIANCES FASTENED IN PLACE | | | | | | |
| | (NEC 220.17) | | | | | | |
| | CONNECTED LOAD | | | | | | |
| a) | DISHWASHER | = | 1,200 | VA | | | |
| b) | GARBAGE DISPOSAL | = | 900 | VA | | | |
| | TOTAL CONNECTED LOAD | = | 2,100 | VA | | | |
| | DEMAND LOAD @ 75% | = | 1,575 | VA | | | |
| | (NEC 220.17) | | | | | | |
| | **SUB-TOTAL DEMAND LOAD** | | | | = | **1,575** | **VA** |
| 4 | COOKING EQUIPMENT(TABLE 220-19) | | 9,600 | VA | = | **9,600** | **VA** |
| 5 | **TOTAL CONNECTED LOAD** | | **22,308** | **VA** | | | |
| 6 | **TOTAL DEMAND LOAD** | | | | = | **19,763** | **VA** |
| 7 | TOTAL AMPS OF DEMAND LOAD @ 208V | | | | = | **95.0** | **AMPS** |

**USE 125A. 120/208V., 2-PHASE, 3 WIRE PANEL WITH 100A MAIN BREAKER**

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## TYPICAL METER CONFIGURATION

**HOUSE PANEL HP1** **1ST FLOOR**

**CONNECTED LOAD**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | PERIMETER LIGHTING | | | 1,290 | VA | | |
| 2 | GENERAL LIGHTING | | | 1,710 | VA = | 3,000 | VA |
| 3 | CONVENIENCE RECEPTACLES | | | | = | 1,000 | VA |
| 4 | BUILDING SIGNS | | | | = | 1,800 | VA |
| 5 | TRASH ROOM ROLL-UP DOOR | | | | = | 1000 | VA |
| 6 | EXHAUST FAN (1HP) | | | | = | 600 | VA |
| | | | | SUB-TOTAL | = | 7,400 | VA |
| | FUTURE LOADS 40% | | | | = | 2960 | VA |
| | | | | **TOTAL** | = | **17,760** | **VA** |

THEREFORE

| | | | | | | |
|---|---|---|---|---|---|---|
| | 208V, 3-PH | = | 49.3 | AMPS | | |
| **TOTAL CONNECTED LOAD** | | = | **49.3** | **AMPS** | | |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 49.3 | X | 0.85 | = | 41.9 | AMPS | |
| **TOTAL DEMAND LOAD** | | | | | = | **41.9** | **AMPS AT 208V.** | |

**USE 100A. 120/208V 3-PHASE, 4 WIRE**
**WITH 100 AMP MAIN BREAKER**

**HOUSE PANEL HP2**

**CONNECTED LOAD**

| | | | | | |
|---|---|---|---|---|---|
| 1 | CORRIDORS LTG 2, 3 & 4 FLRS | = | 9,000 | VA | |
| 2 | OTHER LIGHTING | = | 3,000 | VA | |
| 3 | CONVENIENCE RECEPTACLES | = | 7,560 | VA | |
| 4 | ROOF EXHAUST FANS (6 TOTAL) | = | 6,000 | VA | |
| 7 | FIRE ALARM SYSTEM & SMOKE DETECTORS | = | 1,200 | VA | |
| 8 | REFUSE CHUTE (AUTO-CLEANING SYS.20A.) | = | 1,000 | VA | |
| 9 | REFUSE CHUTE (EXH. FAN 1/5HP) | = | 1,000 | VA | |
| | **TOTAL** | = | **28,760** | **VA** | |

THEREFORE

| | | | | | |
|---|---|---|---|---|---|
| @ | 208V, 3-PH | = | 79.9 | AMPS | |
| **TOTAL CONNECTED LOAD** | | = | **79.9** | **AMPS** | |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 79.9 | X | 0.85 | | | | |
| | = | 67.9 | | | | | | |
| FUTURE LOAD | = | 1.25 | | | | | | |
| | = | 67.9 | X | 1.25 | = | 84.9 | | |
| **TOTAL DEMAND LOAD** | | | | | = | **84.9** | **AMPS AT 208V.** | |

**USE 100A. 120/208V 3-PHASE, 4 WIRE**
**WITH 100 AMP MAIN BREAKER**

**PANEL LP** **2nd FLOOR**

AREA 500

**CONNECTED LOAD**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | GENERAL LIGHTING | | | 1,750 | VA = | 1,750 | VA |
| 2 | CONVENIENCE RECEPTACLES | | | 3000 | VA = | 3,000 | VA |
| 3 | HEATERS | | | | = | 4,000 | VA |
| | | | | SUB-TOTAL | = | 8,750 | VA |
| 6 | FUTURE LOADS 40% | | | | = | 3500 | VA |
| | | | | **TOTAL** | = | **12,250** | **VA** |

THEREFORE

| | | | | | |
|---|---|---|---|---|---|
| @ | 208V, 3-PH | = | 34.0 | AMPS | |
| **TOTAL CONNECTED LOAD** | | = | **34.0** | **AMPS** | |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 34.0 | X | 0.85 | = | 28.9 | AMPS | |
| **TOTAL DEMAND LOAD** | | | | | = | **28.9** | **AMPS AT 208V.** | |

**USE 100A. 120/208V 3-PHASE, 4 WIRE**
**WITH 100 AMP MAIN BREAKER**

**Garage Panel GP** **2nd FLOOR**

AREA 4663 sq. ft MIN 1.5 VA /SQ FT

**CONNECTED LOAD**

| | | | |
|---|---|---|---|
| 1 | GARAGE LIGHTING 120V. | = | 6,995 VA |
| 2 | GARAGE ROLL UP DOOR - 10FLA. 208V/1/60 | = | 3,200 VA |
| 3 | GARAGE EXHAUST FAN 1 (7.5HP) | = | 5,550 VA |
| 4 | FUTURE LOADS 40% | = | 6298 VA |
| | **TOTAL** | = | **22,042** VA |

| | | | | |
|---|---|---|---|---|
| THEREFORE @ | 208V, 3-PH | = | 61.2 | AMPS |
| **TOTAL CONNECTED LOAD** | | = | **61.2** | **AMPS** |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 61.2 | X | 0.85 | = | 52.0 | AMPS | |
| **TOTAL DEMAND LOAD** | | | | | = | **52.0** | **AMPS AT 208V.** | |

**USE 100A. 120/208V 3-PHASE, 4 WIRE**
**WITH 100 AMP MAIN BREAKER**

**C6 -LAUNDRY**

AREA 1100

**CONNECTED LOAD**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | LIGHTING 3.5 VA/SF | | | 3,850 | VA | | |
| 2 | CONVENIENCE RECEPT. | | | 3,000 | VA = | 6,850 | VA |
| - | | | | | | | |
| 3 | COIN CLOTHES WASHERS | | 16 | 2080 | = | 33,280 | VA |
| 4 | GAS DRYERS | | 16 | 3000 | = | 48,000 | VA |
| 4 | ROOF EXHAUST FAN 7 (3HP) | | | | = | 2,238 | VA |
| | | | | **TOTAL** | = | **83,518** | **VA** |

THEREFORE

| | | | | | |
|---|---|---|---|---|---|
| @ | 208V, 3-PH | = | 232.0 | AMPS | |
| **TOTAL CONNECTED LOAD** | | = | **232.0** | **AMPS** | |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 232.0 | X | 0.85 | | | | |
| | = | 197.2 | | | | | | |
| FUTURE LOAD | = | 0 | | | | | | |
| | = | 0.0 | X | 0 | = | 197.2 | | |
| **TOTAL DEMAND LOAD** | | | | | = | **197.2** | **AMPS AT 208V.** | |

**USE 200A. 120/208V., 3-PHASE, 4 WIRE PANEL**
**WITH 100 AMP. MAIN BREAKER**

**COMMERCIAL SPACES PANELS CP1 & CP4**

AREA 1100 SF

**CONNECTED LOAD**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | LIGHTING 3.5 VA/SF | | | 3,850 | VA | | |
| 2 | CONVENIENCE RECEPT. | | | 3,000 | VA = | 6,850 | VA |
| 3 | HVAC (EST. 5 TON) | | | | = | 10,000 | VA |
| 4 | OTHER | | | | = | 10,000 | VA |
| 5 | FUTURE LOADS 40% | | | | = | 10740 | VA |
| | | | | **TOTAL** | = | **37,590** | **VA** |

| | | | | | | |
|---|---|---|---|---|---|---|
| @ | 208V, 3-PH | = | 104.4 | AMPS | | |
| **TOTAL CONNECTED LOAD** | | = | **104.4** | **AMPS** | | |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 104.4 | X | 0.85 | = | 88.8 | AMPS | |
| **TOTAL DEMAND LOAD** | | | | | = | **88.8** | **AMPS AT 208V.** | |

**USE 200A 120/208V., 3-PHASE, 4-WIRE PANEL WITH 200A. MAIN BREAKER**

**COMMERCIAL SPACES PANELS CP2, CP3, CP5**

AREA 1100 SF

**CONNECTED LOAD**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | LIGHTING 3.5 VA/SF | | | 3,850 | VA | | |
| 2 | CONVENIENCE RECEPT. | | | 3,000 | VA = | 6,850 | VA |
| 3 | HVAC (EST. 5 TON) | | | | = | 10,000 | VA |
| 4 | OTHERS | | | | = | 10,000 | VA |
| | | | | | | 26,850 | |
| | | | | **TOTAL** | = | **26,850** | **VA** |

| | | | | | | |
|---|---|---|---|---|---|---|
| THEREFORE @ | 208V, 3-PH | = | 74.6 | AMPS | | |
| **TOTAL CONNECTED LOAD** | | = | **74.6** | **AMPS** | | |

**DEMAND LOAD**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEMAND LOAD | = | CONN. LOAD | X | 0.85 | | | | |
| | | 74.6 | X | 0.85 | = | 63.4 | AMPS | |
| **TOTAL DEMAND LOAD** | | | | | = | **63.4** | **AMPS AT 208V.** | |

**RECOMMEND TO USE 100A. 120/208V, 3-PHASE, 4 WIRE PANEL**
**WITH 125 AMP MAIN BREAKER**

**ELEVATOR UNIT**

| | | | | | |
|---|---|---|---|---|---|
| **FLA = 100A, @ 208V 3-PHASE** | | | | = | **27,000** VA |
| THEREFORE @ | 208V, 3-PH | = | 75.0 | AMPS | |
| **TOTAL CONNECTED LOAD** | | = | **75.0** | **AMPS** | |

**RECOMMEND TO USE 100A. 120/208V, 3-PHASE, 4 WIRE PANEL**
**WITH 125 AMP MAIN BREAKER**

**TOTAL LOAD AND MAIN PANEL RATING**

| AREA | NO. UNITS | VA PER UNIT | TOTAL VA | LIGHTING | RECEPT. | OTHERS |
|---|---|---|---|---|---|---|
| SQ. FT. | | | | | | |
| 700 | | | | | | |
| UNIT A | 15 | 20,300 | 304500 | 31500 | 45000 | 228000 |
| 750 | | | | | | |
| UNIT B | 3 | 20,450 | 61350 | 6750 | 9000 | 45600 |
| 900 | 9 | 21,900 | 197100 | 24300 | 27,000 | 145800 |
| UNIT C D F G | | | | | | |
| 1036 | 3 | 22,308 | 66924 | 9324 | 9,000 | 48600 |
| UNIT E | | | | | | |
| UNIT TOTAL | 30 | | | | | |
| HOUSE PANELS | | | | | | |
| HP1 | 1 | | 17,760 | 3,000 | 1,000 | 13760 |
| HP2 | 1 | | 28,760 | 18,000 | 7,560 | 3200 |
| PNL LP | 1 | 12,250 | 12,250 | 1,750 | 3,000 | 7500 |
| 1,100 S.F. | | | | | | |
| COMMERCIAL TENANTS | 2 | 37,590 | 75180 | 7700 | 6000 | 61480 |
| PNLS: CP1 & CP4 | | | | | | |
| 1,100 S.F. | | | | | | |
| COMMERCIAL TENANTS | 3 | 26,850 | 80550 | 11550 | 9000 | 60000 |
| PNLS: CP3 & CP4 | | | | | | |
| 1100 SF COMMERCIAL TENANT | | | | | | |
| CP6 : LAUNDRY | 1 | 83,518 | 83518 | 3,850 | 3,000 | 76,668 |
| ELEVATOR | 1 | | 36,000 | | | 36000 |
| **TOTAL (VA)** | | | **963892** | **117724** | **119560** | **726608** |

| | | | |
|---|---|---|---|
| **TOTAL CONNECTED LOAD** | = | **963892** | **VA** |

**DEMAND LOAD**
*PER NEC SECTION 220-11*

| | | | | | | |
|---|---|---|---|---|---|---|
| LIGHTING | 3,000 AT 100% DEMAND FACTOR | | | | | |
| | 3,000 | X | 1.0 | = | 3000 | VA |
| | FROM 3,001 TO 120,000 AT 35% DEMAND FACTOR | | | | | |
| | 114,724 | X | 0.35 | = | 40153.4 | VA |
| | | | **SUB-TOTAL** | = | 43153.4 | VA |
| RECEPT. LOAD | 1ST. 10,000 VA @ 100% DEMAND FACTOR | | | | | |
| | 10,000 | X | 1.0 | = | 10000 | |
| | REMAINDER VA @ 50% DEMAND FACTOR | | | | | |
| | 109,580 | X | 0.5 | = | 54780 | VA |
| | | | **SUB-TOTAL** | = | 64780 | VA |
| OTHER LOADS | DEMAND FACTOR 85% | | | | | |
| | 726608 | X | 0.85 | = | 617616.8 | VA |
| **TOTAL:** | 617616.8 | @ | 208 | = | 1716 | AMP |
| | SAFETY MARGIN | | 10% | = | 1887 | AMPS |

**USE 2,000 AMPS MAIN SERVICE @ 120/208V. 3-PHASE 4 WIRE**

CITY APPROVAL STAMP


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FOR BUILDING PERMIT
09/29/2005

CLIENT:
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PROJECT TITLE:
FRUITVALE COMMONS
1242 35th Ave Oakland, CA 94601

SHEET TITLE:
ELECTRICAL LOAD CALCULATIONS

REVISIONS

JOB NUMBER
J2002.060

DRAWN BY: S. CRUZ
CHECKED BY: D. PAUL

SCALE (U.O.N.)
AS SHOWN

DATE
9/29/2005

SHEET NUMBER
**E0.2**
2 OF 7 SHEETS