## 20 AMP BRANCH CIRCUIT WIRING TABLE

| AWG | MAX WIRE LENGTH (FT) | |
|---|---|---|
| | 120 V | |
| #12 | 0 – 45 | |
| #10 | 46 – 70 | |
| #8 | 71 – 115 | |
| #6 | 116 – 180 | |
| #4 | 181 – 290 | |

BRANCH CIRCUIT CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3% PER ASHRAE 90.1– 2004, PARAGRAPH 8.4.1.2.

## LIGHTING FIXTURE SCHEDULE

| MARK | SYMBOL | MFG./ MODEL # | DESCRIPTION | VOLTS | LAMPS | MOUNTING | LAMP TYPE |
|---|---|---|---|---|---|---|---|
| STANDARD FLUORESCENT FIXTURES | | | | | | | |
| A | | LITHONIA 2GT8 4 32 A12 MVOLT 1/4 GEB10IS | 2'x4' RECESS. TROFFER STANDARD LENS | 120V. | 4 | T-BAR GRID | F32T8/XL/SPX50/HL/ECO |
| D | | LITHONIA SB 2 32 MVOLT GEB10IS | 4'–0" SURFACE WRAP FLUORESCENT | 120V. | 2 | SURFACE DYP. BD. | F32T8/XL/SPX50/HL/ECO |
| E | | LITHONIA S 1 32 MVOLT GEB10IS WCG, HC14 | 4'–0" STRIP FIXTURE W/ WIRE GAURD | 120V. | 1 | | F32T8/XL/SPX50/HL/ECO |
| F | | CORELITE – STELLAR S4 WB 4T8 2 C DL70 12 | DIRECT / INDIRECT 12'-0"L 12" SUSPENDED FLUOR. LT | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| F1 | EL | CORELITE – STELLAR S4 WB 4T8 1 E DL70 12 | DIRECT / INDIRECT 12'-0"L 12" SUSPENDED FLUOR. LT ON EMERGENCY CIRCUIT | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| F2 | | CORELITE – STELLAR S4 WB 4T8 2 C DL70 12 | DIRECT / INDIRECT 12'-0"L 12" SUSPENDED FLUOR. LT W/ EMERGENCY BATT. | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| G | | LITHONIA 2UC 32 MVOLT GEB10IS SEE SHT. E2 FOR LOCATION | 48" UNDER SHELF FLUORESCENT LIGHT W/LENS | 120V. | 1 | UNDER SHELF | F32T8/XL/SPX50/HL/ECO |
| GF | | SPECTRUM SP7VF132E-(*)-7610CL | 7" ROUND, 32W CF RECESSED DOWNLIGHT | 120V. | 1 | RECESSED | F32T8X/841/A/ECO |
| Q | | FURNISHED BY TRADER JOE'S | LIGHTING @ REFRIGERATION & FREEZER BOXES | 120V. | – | | VAPOR TIGHT INSTALLED BY ELEC. CONTRACT |
| R | | CORELITE – STELLAR S4 WB 4T8 2 C DL70 8 | DIRECT / INDIRECT 6'-0"L 12" SUSPENDED FLUOR. LT | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| R1 | EL | CORELITE – STELLAR S4 WB 4T8 1 E DL70 8 | DIRECT / INDIRECT 6'-0"L 12" SUSPENDED FLUOR. LT ON EMERGENCY CIRCUIT | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| R2 | | CORELITE – STELLAR S4 WB 4T8 2 C DL70 8 | DIRECT / INDIRECT 6'-0"L 12" SUSPENDED FLUOR. LT W/ EMERGENCY BATT. | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| S | | CORELITE – STELLAR S4 WB 4T8 2 C DL70 4 | DIRECT / INDIRECT 4'-0"L 12" SUSPENDED FLUOR. LT | 120V. | 4 | | F32T8/XL/SPX50/HL/ECO |
| WL | | GARDO LIGHTING 103MT–UD175MH120BGP FURNISHED BY TJ'S | 175 WATT METAL HALIDE WALL MOUNTED | 120V | 1 | | MH175 |
| EXIT SIGNS & EMERGENCY LIGHTING | | | | | | | |
| EXIT | | LITHONIA LQM S W 3 R 120/277 EL N | LED EXIT SIGN RED LETTERS W/ EMERG. BATTERY | UNV. | – | UNIVERSAL SURFACE | L.E.D. |
| H | | LITHONIA ELM2 | COMPACT EMERGENCY LIGHT | UNV. | 2 | WALL/ CLG MOUNTED | 5.4W WEDGE KRYPTON |
| H1[2] | | LITHONIA ELM627 | REMOTE CAPABLE EMERGENCY LIGHT (W/ 2–HEADS) | UNV. | 2 | 2 | |
| H1[0] | | LITHONIA ELM618 RO | REMOTE CAPABLE EMERGENCY LIGHT (W/ 0–HEADS) | UNV. | 0 | | – |
| H2 | | LITHONIA ELA NX N0806 | REMOTE EMERGENCY HEAD (SINGLE HEAD) | UNV. | 1 | WEATHER PROOF | – |
| EXTERIOR LIGHTING | | | | | | | |
| K | | RAB WP1H50 | 50 WATT METAL HALIDE WALLPACK | 120V. | 1 | | MH50/MED |
| L | | LITHONIA TWH 250M TB LPI ORS Q1500C | 250 WATT METAL HALIDE WALL PACK W/ QUARTZ RESTRIKE | 120V. | 1 | | MVR250/U |
| TRACK LIGHTING | | | | | | | |
| M | | CON–TECH LT–4–P | 4'–0" SINGLE CIRCUIT TRACK "WHITE" | 120V. | – | – | – |
| N | | CON–TECH LT–6–P | 6'–0" SINGLE CIRCUIT TRACK "WHITE" | 120V. | – | – | – |
| O | | CON–TECH LT–8–P | 8'–0" SINGLE CIRCUIT TRACK "WHITE" | 120V. | – | – | – |
| P | | CON–TECH CTL–1540–P | TRACK MOUNTED FLUORESCENT WALL WASHER "WHITE" | 120V. | 2 | – | F40/30BX/SPX41 |
| U[1] | | CON–TECH CTL–816–P | LOW VOLTAGE MR16 GIMBAL RING TRACK FIXTURE "WHITE" | 120V. | 1 | – | Q50MR16/C/CG1 |
| U[2] | | CON–TECH LA2050–P | 50W ELECTRONIC TRANSFORMER "WHITE" (FOR CTL816) | 120V. | | | |
| U[3] | | CON–TECH LA1024LV–P | 24" FIXTURE STEM EXTENSION "WHITE" (FOR CTL816) | | | | |
| U[4] | | CON–TECH LA1048LV–P | 48" FIXTURE STEM EXTENSION "WHITE" (FOR CTL816) | | | | |

(*)= INSERT VOLTAGE REQUIRED NO. (SEE SHT. E–3)

EM — HALF–SHADED FIXTURES SHALL BE EQUIPPED WITH AN EMERGENCY BALLAST CAPABLE OF OPERATING ONE (1) FLUORESCENT LAMP AT 3,000 LUMENS INITIAL OUTPUT IN THE EMERGENCY MODE FOR A MINIMUM OF 90 MINUTES. THE EMERGENCY BALLAST SHALL BE FURNISHED WITH AN ILLUMINTED TEST SWITCH AND CHARGING INDICATOR LIGHT TO MONITOR THE BATTERY AND CHARGER, AND SHALL BE UL LISTED.

IN COMPLIANCE WITH NEC ARTICLE 410.73(G), FLUORESCENT LUMINAIRES THAT UTILIZE DOUBLE–ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE OR RE–BALLASTED MUST HAVE A DISCONNECTING MEANS, TO DISCONNECT SIMULTANEOUSLY ALL CONDUCTORS OF THE BALLAST, INCLUDING THE GROUNDED (NEUTRAL) CONDUCTOR. THE DISCONNECTING MEANS MUST BE ACCESSIBLE TO QUALIFIED PERSONS. THIS DISCONNECTING MEANS SHALL NOT BE REQUIRED FOR EMERGENCY LUMINAIRES.

## ELECTRICAL SYMBOLS AND ABBREVIATIONS

| SYMBOL | DESCRIPTION |
|---|---|
| | CONDUIT HOME–RUN TO PANELBOARD (NUMBER OF WIRES INDICATED IF MORE THAN 2) |
| —T— | TELEPHONE CONDUIT WITH DRAG WIRE (3/4" MINIMUM UNLESS NOTED OTHERWISE) |
| | FLEXIBLE CONDUIT |
| | CONDUIT DOWN |
| | CONDUIT UP |
| | CONDUIT CAP |
| 480V 600A | BUSWAY WITH DESCRIPTION |
| —G— | GROUNDING CONDUCTOR |
| J | CEILING JUNCTION BOX |
| J | WALL JUNCTION BOX |
| | DUPLEX RECEPTACLE OUTLET |
| | SINGLE RECEPTACLE OUTLET |
| | DOUBLE DUPLEX RECEPTACLE OUTLET |
| GFCI WP | GROUND FAULT CIRCUIT INTERUPTER DUPLEX OUTLET WITH WEATHERPROOF COVER |
| | SPLIT WIRED DUPLEX RECEPTACLE |
| IG | DUPLEX ISOLATED GROUND |
| 3 | SPECIAL PURPOSE OUTLET – USE SUBSCRIPT TO IDENTIFY TYPE IN SPECS |
| * | FLOOR RECEPTACLE OUTLET USE SUBSCRIPT TO IDENTIFY TYPE IN SPECS |
| | RECEPTACLE RACEWAY |
| $* | SINGLE POLE SWITCH – 40" A.F.F. UNLESS NOTED OTHERWISE<br>USE SUBSCRIPT TO DESIGNATE CONTROL OF PARTICULAR OUTLETS<br>*=2 DOUBLE POLE SWITCH<br>*=3 THREE–WAY SWITCH<br>*=4 FOUR–WAY SWITCH<br>*=WP WEATHERPROOF SWITCH<br>*=K KEY OPERATED SWITCH |
| $T | TIMER SWITCH – INTERMATIC MODEL ET616 WALL SWITCH WITH COUNTDOWN TIMER. |
| $O | OCCUPANCY SENSOR SWITCH – WATT STOPPER MODEL DW–200 |
| 600 | DIMMER SWITCH – NUMBER INDICATES WATTAGE |
| P | PHOTOCELL |
| | POWER OR DISTRIBUTION PANEL |
| | LIGHTING OR APPLIANCE PANEL |
| T | TRANSFORMER |
| 60A F 40A L | FUSIBLE DISCONNECT |
| 30 | NON–FUSIBLE DISCONNECT SWITCH (NUMBER INDICATES SWITCH SIZE) |
| | MAGNETIC MOTOR STARTER |
| M | COMBINATION DISCONNECT SWITCH AND MOTOR STARTER |
| | ELECTRIC MOTOR |
| | BELL |
| | BUZZER |
| | PUSHBUTTON |
| | FIRE SPRINKLER FLOW SWITCH |
| T | FIRE SPRINKLER TAMPER SWITCH |
| F | FIRE SPRINKLER FLOW SWITCH |
| T | FIRE SPRINKLER TAMPER SWITCH |
| | AUDIBLE NOTIFICATION APPLIANCE 90"AFF |
| | VISIBLE NOTIFICATION APPLIANCE 80"AFF |
| C | VISIBLE NOTIFICATION APPLIANCE MOUNTED ON FINISHED CEILING |
| | COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE 80"AFF |
| | MANUAL PULL STATION, 48"AFF |
| | SMOKE DETECTOR IN DUCT AS REQUIRED BY CODE. FURNISHED AND MOUNTED BY MECHANICAL CONTRACTOR. ELECTRICAL CONNECTIONS BY ELECTRICAL CONTRACTOR. SMOKE DETECTOR MUST BE COMPATIBLE W/ BLDG FIR ALARM SYSTEM IF/AS APPLICABLE |
| AFF | ABOVE FINISHED FLOOR |
| NIC | NOT IN CONTRACT |
| FBO | FURNISHED BY OTHERS |
| EC | ELECTRICAL CONTRACTOR |
| UON | UNLESS OTHERWISE NOTED |
| U/G | UNDERGROUND |
| O/H | OVERHEAD |
| WH | WATER HEATER |
| DR | DUPLEX RECEPTACLE |
| CO | CONDUIT ONLY |
| VIF | VERIFY IN FIELD |


DON PENN
CONSULTING ENGINEER
635 WESTPORT PARKWAY, SUITE 300
GRAPEVINE, TEXAS 76051
817-410-2858 FAX 817-251-8411



Jeffrey Taylor
Architect
572 North Broadway
White Plains, N.Y. 10603
tel 914 289 0011
fax 914 289 0022


SEAL

COMMENTS

REVISIONS

| NO | DATE |
|---|---|
| | |

DATE 04.28.10
JOB NO. FT-1912
DRAWN BY: FT-A
TENANT STORE No. XXX
SPACE No. XXXX

SALES: 17,224 sq. ft.
STOCK: 5,424 sq. ft.
MISC.: 1,464 sq. ft.
TOTAL: 23,930 sq. ft.

PROJECT
TRADER JOE'S
87 MARGINAL WAY
PORTLAND, ME. 04101

SHEET NAME
LIGHTING FIXTURE SCHEDULE AND ELECTRICAL SYMBOLS

E-0