

BRANCH CIRCUITS SCHEDULE

120V OR 277V - 1Ø, 2W CIRCUITS	
CIRCUIT BREAKER	CONDUCTOR
20A-1P	2-12 AWG & 1-12 AWG EGC IN 3/4" C
30A-1P	2-10 AWG & 1-10 AWG EGC IN 3/4" C
40A-1P	2-8 AWG & 1-10 AWG EGC IN 3/4" C
50A-1P	2-6 AWG & 1-10 AWG EGC IN 3/4" C
60A-1P	2-4 AWG & 1-10 AWG EGC IN 1" C

208V OR 480V - 1Ø, 2W CIRCUITS	
20A-2P	2-12 AWG & 1-12 AWG EGC IN 3/4" C
30A-2P	2-10 AWG & 1-10 AWG EGC IN 3/4" C
40A-2P	2-8 AWG & 1-10 AWG EGC IN 3/4" C
50A-2P	2-6 AWG & 1-10 AWG EGC IN 3/4" C
60A-2P	2-4 AWG & 1-10 AWG EGC IN 1" C

208V OR 480V - 3Ø, 3W CIRCUITS	
20A-3P	3-12 AWG & 1-12 AWG EGC IN 3/4" C
30A-3P	3-10 AWG & 1-10 AWG EGC IN 3/4" C
40A-3P	3-8 AWG & 1-10 AWG EGC IN 3/4" C
50A-3P	3-6 AWG & 1-10 AWG EGC IN 1" C
60A-3P	3-4 AWG & 1-10 AWG EGC IN 1" C

- NOTES:**
1. TYPE MC CABLE SHALL INCLUDE FULL SIZE INSULATED GROUND CONDUCTOR. SIZES AS INDICATED IN SCHEDULE.
 2. UPGRADE WIRE SIZE ACCORDING TO VOLTAGE DROP CHART.
 3. UPGRADE FEEDER SIZES NOT INCLUDED IN VOLTAGE DROP CHART TO REQUIREMENTS IN ACCORDANCE WITH THE NEC.

VOLTAGE DROP CHART

120V CKTS. / MAX. LENGTH			
LOAD UP TO	CONDUCTOR SIZE #12	CONDUCTOR SIZE #10	CONDUCTOR SIZE #8
800 VA	155 FT	245 FT	390 FT
1000 VA	125 FT	195 FT	310 FT
1200 VA	105 FT	165 FT	260 FT
1400 VA	90 FT	140 FT	220 FT
1600 VA	80 FT	125 FT	195 FT
1800 VA	70 FT	110 FT	175 FT
277V CKTS. / MAX. LENGTH			
2000 VA	330 FT	525 FT	830 FT
2500 VA	265 FT	420 FT	665 FT
3000 VA	220 FT	350 FT	555 FT
3500 VA	190 FT	300 FT	475 FT
4000 VA	165 FT	260 FT	415 FT

WIRING DEVICES

- ⌚ - DUPLEX RECEPTACLE
- ⌚ - DOUBLE DUPLEX RECEPTACLE
- ⌚ - GFCI DUPLEX RECEPTACLE
- ⌚ - CEILING MOUNTED DUPLEX RECEPTACLE COORDINATE EXACT LOCATION IN THE FIELD
- ⌚R - NEMA 14-50R RECEPTACLE COORDINATE NEMA CONFIGURATION WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS PRIOR TO INSTALLATION FURNISH AND INSTALL #6 AWG WIRE
- ⌚L5 - SPECIAL PURPOSE RECEPTACLE "L5" DENOTES L5-20R (20A-1P) RECEPTACLE FURNISH AND INSTALL #10 AWG WIRES
- ⌚L6 - SPECIAL PURPOSE RECEPTACLE "L6" DENOTES L6-30R (30A-2P) RECEPTACLE FURNISH AND INSTALL #10 AWG WIRES
- \$u - WALL MTD. ULTRASONIC/INFRARED OCCUPANCY SENSOR
- \$l - WALL MTD. (2) SINGLE-POLE SWITCHES LEVITON 5627 OR APPROVED EQUAL
- \$3l - WALL MTD. (2) 3-WAY SWITCHES LEVITON 5640 OR APPROVED EQUAL
- \$ - SINGLE POLE SWITCH
- \$3 - THREE-WAY SWITCH
- \$4 - FOUR-WAY SWITCH
- \$D - SINGLE POLE DIMMER SWITCH
- \$3D - THREE-WAY DIMMER SWITCH
- ⌚ - CEILING MTD. ULTRASONIC/INFRARED OCCUPANCY SENSOR, WITH POWER PACK(S). 2200 SQ FT.

WIRING DEVICES ABBREVIATIONS:

"C" DENOTES MTD. 6" ABOVE COUNTER TOP

"WP/WIC" DENOTES WEATHER PROOF WITH WHILE-IN-USE COVER

EQUIPMENT

- ⌚ - ELECTRICAL PANEL, SURFACE MTD.
- ⌚ - FUSED DISCONNECT SWITCH "30AS" DENOTES 30A SWITCH "20AF" DENOTES 20A FUSE
- ⌚ - UNFUSED DISCONNECT SWITCH
- ⌚ - JUNCTION BOX
- ⌚ - JUNCTION BOX, FLOOR MOUNTED
- \$t - SAFETY DISCONNECT SNAP SWITCH
- ⌚ - FLEXIBLE CONNECTION
- ⌚ - EMERGENCY POWER SHUTOFF BUTTON

WIRING

- ⌚ - HOME RUN TO PANEL
- ⌚ - DENOTES - INSTALL 10 AWG WIRE TO ALL FIXTURES IN THE CIRCUIT UNLESS OTHERWISE NOTED.
- WIRE SIZES SHOWN ON WIRING RUNS ARE FOR THE ASSISTANCE TO THE ELECTRICIAN IN RUNNING THE WIRING. HOWEVER, IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY ALL WIRE SIZES AND INSTALL THE REQUIRED NUMBER OF CONDUCTORS NEEDED FOR THE INSTALLATION.

ELECTRICAL LEGEND

FIRE ALARM

- ⌚ - SMOKE DETECTOR, CEILING MOUNTED
- ⌚ - CARBON MONOXIDE DETECTOR
- ⌚¹³⁵ - HEAT DETECTOR, FIXED 135 DENOTES TEMPERATURE
- ⌚ - PULL STATION
- ⌚^{110cd} - VISUAL APPLIANCE 110cd DENOTES CANDELA RATING CEILING MOUNTED
- ⌚^{110cd} - COMBINATION AUDIOVISUAL APPLIANCE 110cd DENOTES CANDELA RATING CEILING MOUNTED
- ⌚^{110cd} - VISUAL APPLIANCE 110cd DENOTES CANDELA RATING WALL MOUNTED
- ⌚^{110cd} - COMBINATION AUDIOVISUAL APPLIANCE 110cd DENOTES CANDELA RATING WALL MOUNTED
- ⌚ - MASTER BOX
- ⌚ - KNOX BOX
- ⌚ - EXTERIOR BEACON 150,000 CANDLE POWER BEACON COORDINATE EXACT LOCATION WITH AHJ
- ⌚ - END-OF-LINE RESISTOR

FIRE ALARM DEVICES ABBREVIATIONS:

- "KL" DENOTES WITH KEY LOCK
- "VP" DENOTES WITH VANDAL PROOF GUARD
- "WG" DENOTES WITH WIRE GUARD
- "WP" DENOTES WEATHERPROOF

TELECOMMUNICATIONS

- ⌚ - VOICE/DATA OUTLET (3) CATEGORY 6 CABLES ONE VOICE DROP AND TWO DATA DROPS UNLESS NOTED OTHERWISE HOMERUN TO TELECOMMUNICATIONS CLOSET
- ⌚ - DATA OUTLET (2) CATEGORY 6 CABLES UNLESS NOTED OTHERWISE HOMERUN TO TELECOMMUNICATIONS ROOM
- ⌚ - WALL PHONE VOICE OUTLET (1) CATEGORY 6 CABLE HOMERUN TO TELECOMMUNICATIONS ROOM
- ⌚ - WIFI ACCESS POINT (2) CATEGORY 6 CABLE CEILING MOUNTED HOMERUN TO TELECOMMUNICATIONS ROOM
- ⌚ - AV OUTLET, WALL MOUNTED, 2-GANG BOX WITH 1-1/4" CONDUIT, STUB-UP ABOVE THE CEILING. PROVIDE WITH PULL STRING AND BUSHING.

NOTES FOR COMMUNICATIONS DEVICES:

1. FOR ALL TEL/DATA OUTLETS PROVIDE 4" BOX AND 3/4" CONDUIT STUB WITH BUSHING AND PULL STRING ABOVE THE CEILING. INCREASE CONDUIT SIZE FOR FOUR OR MORE CAT. 6 CABLES.
2. MOUNT VOICE, DATA AND VIDEO OUTLETS A MINIMUM OF 12" FROM A POWER OUTLET. COORDINATE LOCATIONS WITH ELECTRICAL DRAWINGS.
3. REFER TO VOICE DATA ABBREVIATIONS FOR CABLE DROP QUANTITIES.

TEL/DATA ABBREVIATIONS:

- "1V/1D" - DENOTES ONE VOICE AND ONE DATA DROP
- "1V/2D" - DENOTES ONE VOICE AND TWO DATA DROPS
- "1V/3D" - DENOTES ONE VOICE AND THREE DATA DROPS
- "2V/2D" - DENOTES TWO VOICE AND TWO DATA DROPS
- "2V/3D" - DENOTES TWO VOICE AND THREE DATA DROPS
- "2V/4D" - DENOTES TWO VOICE AND FOUR DATA DROPS
- "1D" - DENOTES ONE DATA DROP
- "2D" - DENOTES TWO DATA DROPS
- "3D" - DENOTES THREE DATA DROPS
- "4D" - DENOTES FOUR DATA DROPS
- "5D" - DENOTES FIVE DATA DROPS
- "6D" - DENOTES SIX DATA DROPS
- "1V" - DENOTES ONE VOICE DROP
- "2V" - DENOTES TWO VOICE DROPS
- "C" - DENOTES MTD. 6" ABOVE COUNTER TOP
- "AV" - DENOTES AUDIOVISUAL
- "H" - DENOTES MOUNTED HIGH, COORDINATE MOUNTING HEIGHT WITH THE ARCHITECT.
- "TV" - DENOTES FOR TELEVISION, COORDINATE MOUNTING HEIGHT IN THE FIELD
- "U" - DENOTES MTD. UNDER COUNTER
- "WP,WIC" - DENOTES WEATHER PROOF WITH "WHILE IN USE" COVER

LIGHTING

- ⌚ - LIGHT FIXTURE "A" DENOTES FIXTURE TYPE "S" DENOTES SWITCH CODE "P-4" DENOTES PANEL AND CIRCUIT NUMBER
- ⌚ - LIGHT FIXTURE WITH EMERGENCY BALLAST "NL" DENOTES NIGHTLIGHT

EGRESS LIGHTING

- ⌚ - EXIT SIGN, SINGLE SIDED
- ⌚ - EXIT SIGN, DUAL SIDED
- ⌚ - EXIT SIGN W/ INTEGRAL HEADS AND REMOTE EMERGENCY HEADS
- ⌚ - REMOTE EMERGENCY HEADS - DUAL
- ⌚ - EMERGENCY BATTERY UNIT

CONNECT EXIT SIGNS TO THE LINE SIDE OF THE NEAREST NORMAL LIGHTING CIRCUIT IN THE AREA.

CONNECT EMERGENCY BATTERY UNITS TO THE LINE SIDE OF THE NEAREST NORMAL LIGHTING CIRCUIT IN THE AREA.

ABBREVIATIONS

- AFF - ABOVE FINISHED FLOOR
- AHJ - AUTHORITY HAVING JURISDICTION
- ATS - AUTOMATIC TRANSFER SWITCH
- AIC - AMPERES INTERRUPTING CAPACITY
- CLG - CEILING MTD.
- EC - ELECTRICAL CONTRACTOR
- F - FRACTIONAL HORSEPOWER
- FACP - FIRE ALARM CONTROL PANEL
- FBO - FURNISHED BY OTHERS
- GC - GENERAL CONTRACTOR
- GFCI - GROUND FAULT CIRCUIT INTERRUPTER
- GFP - GROUND FAULT PROTECTION
- HH - HANDHOLE
- LCP - LIGHTING CONTROL PANEL
- MCB - MAIN CIRCUIT BREAKER
- MGB - MAIN GROUNDING BUSBAR
- MLO - MAIN LUGS ONLY
- MD - MOTORIZED DAMPER
- NTS - NOT TO SCALE
- HB - HIGH BAY
- PTZ - PAN/TILT/ZOOM
- TBD - TO BE DETERMINED
- TC - TIME CLOCK
- VFD - VARIABLE FREQUENCY DRIVE
- VSD - VARIABLE SPEED DRIVE
- W - WALL MOUNTED
- WG - WIRE GUARD
- WIC - WHILE IN USE COVER
- WP - WEATHERPROOF
- XFMR - TRANSFORMER

ACCESS CONTROL

NOT IN CONTRACT. BY OWNER.

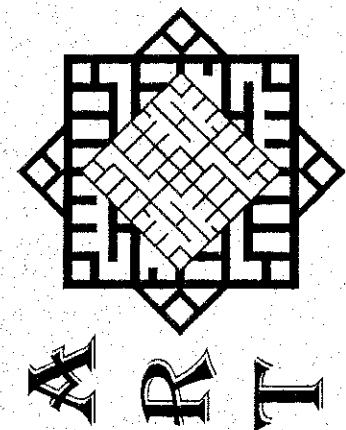
VIDEO SURVEILLANCE

- ⌚ - CAMERA AND WIRING BY OWNER.

NOTES FOR VIDEO SURVEILLANCE DEVICES:

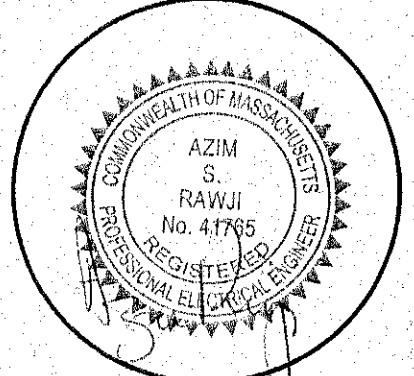
1. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL 1" EMT FROM EACH CAMERA TO THE ELECTRICAL ROOM.

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MENDON
POLICE
STATION

ELECTRICAL
LEGEND & NOTES

DATE: 12/21/12

SCALE: NTS

DRAWN BY: NAJ

CHECKED BY: AR

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