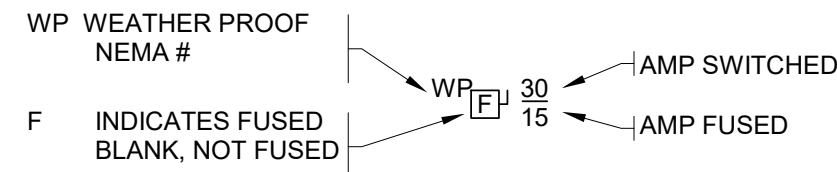


HVAC/MECHANICAL EQUIPMENT LEGEND

⊘	MANUAL MOTOR STARTER W/THERMAL ELEMENT
□	NON-FUSED SAFETY SWITCH (SEE SAFETY SWITCH DESIGNATION KEY)
☒	MAGNETIC MOTOR STARTER FURNISHED BY OTHERS WIRED BY E.C.
☒	COMBINATION MAGNETIC MOTOR STARTER AND DISCONNECT SWITCH FURNISHED BY OTHERS WIRED BY E.C.
VFD	FURNISHED AND INSTALLED WITH INTEGRAL FILTERS BY OTHERS WIRED BY ELECTRICAL CONTRACTOR
ATC	AUTOMATIC TEMPERATURE CONTROL PANEL FURNISHED AND INSTALLED BY OTHERS (LOW VOLTAGE CONTROL WIRING FURNISHED AND INSTALLED BY OTHERS) 120V BRANCH CIRCUIT BY E.C.
□	MAGNETIC CONTACTOR (FURNISHED AND INSTALLED BY OTHERS WIRED BY E.C.)
5	MOTOR-NUMBER INDICATES HORSEPOWER
MD	MOTORIZED DAMPER
RTU	RTU INDICATES EQUIPMENT TYPE
1	EQUIPMENT REFERENCE NUMBER
CB	ENCLOSED CIRCUIT BREAKER
E	EPO BUTTON
HT	HEAT TRACE (FURNISHED AND INSTALLED BY OTHERS WIRED BY E.C.)
	HEAT TRACE CABLING (FURNISHED AND INSTALLED BY OTHERS WIRED BY E.C.)

SAFETY SWITCH DESIGNATION KEY



HVAC/MECHANICAL EQUIPMENT NOTES:

- VOLTAGE, CURRENT, AND QUANTITY OF TERMINATION POLES SHALL MEET OR EXCEED THE SOURCE CAPACITY AND WIRING REQUIREMENTS OF THE BRANCH CIRCUIT.
- ALL DISTRIBUTION EQUIPMENT SHALL HAVE ADHESIVE BACKED IDENTIFICATION LABELS.
- COORDINATE FUSE SIZE AND TYPE PER EQUIPMENT NAME PLATE.

WIRING METHODS SCHEDULE

LOCATION	RACEWAY	FITTINGS	SUPPORTS (NOTE 2)	REMARKS
UNDERGROUND	PVC-EB PVC-DB	GLUED	N/A	②③④
EXPOSED EXTERIOR	PVC-SCH 40	GLUED	SEE NOTE 1	①
EXPOSED INTERIOR	EMT MC CABLE	SET SCREW CLAMP	3/10" 1/6"	⑤
CONCEALED INTERIOR FEEDERS	EMT MC CABLE	SET SCREW CLAMP	3/10" 1/6"	⑤
CONCEALED INTERIOR BRANCH	MC CABLE	CLAMP	1/6"	

WIRING METHODS NOTES

- WIRING METHODS AND MATERIALS TO BE PROVIDED IN ACCORDANCE WITH APPLICABLE SECTIONS OF NEC ARTICLE 300.
- FLEXIBLE METALLIC CONDUIT (LIQUID-TIGHT WHERE SUBJECT TO MOISTURE) SHALL BE UTILIZED BETWEEN NON-FLEXIBLE AND VIBRATING COMPONENTS, IN ACCORDANCE WITH NFPA-70-2014 PER ARTICLES 348 AND 350.
- MAXIMUM DISTANCE FROM CONNECTOR OR COUPLING/MAXIMUM DISTANCE BETWEEN SUPPORTS PER NFPA 70.
- EXPANSION FITTINGS AS SUGGESTED BY THE MANUFACTURER AND/OR AS REQUIRED BY PROJECT.
- BENDS SHALL NOT EXCEED FOUR QUARTER BENDS (360° (DEGREES) TOTAL) BETWEEN PULL POINTS, CONDUIT BODIES CLEAR PULLING POSITIONS SHALL BE MAINTAINED.
- CONDUIT PENETRATIONS AND ELECTRICAL INSTALLATIONS SHALL BE MADE AS REQUIRED TO LIMIT THE SPREAD OF FIRE AND PRODUCTS OF COMBUSTION IN ACCORDANCE WITH SECTION 300.21.
- CONDUIT PENETRATIONS THROUGH FIRE-RATED ASSEMBLIES SHALL BE SEALED WITH A U.L. LISTED FIRE STOPPING SYSTEM INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

REMARKS:

- USE PVC SCHD 80, IMC, OR, RGS AS REQUIRED OR WHERE SUBJECT TO DAMAGE.
- SEE TRENCH DETAIL FOR PLACEMENT, ELEVATION AND WARNINGS.
- COORDINATE UTILITY REQUIREMENTS WHERE APPLICABLE.
- UNDER GROUND CONDUITS TO BE 3/4" DIAMETER MINIMUM.
- FIRE ALARM CABLING SHALL BE FPLP, FPLP, OR METAL CLAD 3/8" ARMORED CABLE.













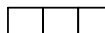









RECEPTACLE LEGEND

FLOOR MTD.	WALL MTD.	NUMBER INDICATES CIRCUIT NUMBER, WALL MOUNTING HEIGHT 18" AFF. (U.O.N. TYPICAL) LETTER INDICATES PREFIX (SEE LISTING BELOW).
□	⊖	DUPLEX RECEPTACLE, NEMA 5-20R
□	⊖	SPECIAL PURPOSE RECEPTACLE, "A" INDICATES NEMA TYPE. (SEE SPECIAL PUPOSE SCHEDULE)
□	⊖	SINGLE RECEPTACLE, NEMA 5-20R
□	⊕	DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R
□	⊖	SWITCHED DUPLEX RECEPTACLE, NEMA 5-20R
□	GFI	GROUND FAULT INTERRUPTING RECEPTACLE
□	⊖	RECEPTACLE, NEMA 5-20R, ON LOAD SIDE OF A GFCI DEVICE OR GFCI CB
□	⊕	DOUBLE GROUND FAULT INTERRUPTING RECEPTACLE
○	P	FLUSH FLOOR MOUNTED POKE THRU
□	T	POWER POLE POWER FURNITURE FEED. "P" DENOTES POWER "T" DENOTES TEL/DATA
□	P	FLUSH WALL OUTLET BOXES FOR POWER AND TELEPHONE/DATA CONNECTION TO OFFICE FURNITURE PARTITION SYSTEM. FURNITURE "WHIP" (IF SHOWN) FURNISHED BY OTHERS.
□	⊖	JUNCTION BOX
□	⊖	MULTI-OUTLET ASSEMBLY WITH OUTLETS ON CENTERS AS INDICATED, (SEE SPECIFICATION).
□	⊖	SURFACE RACEWAY. DEVICES INDICATED ON DRAWING.
□	EVC	ELECTRIC VEHICLE CHARGER. U.O.N. POWER BY E.C. CHARGER BY OWNER.
□	HD	HAND DRYER, PROVIDED BY OTHERS, WIRED BY E.C.

POWER DEVICE PREFIX LISTING

AC	WINDOW AIR CONDITIONER	GFI	LOAD SIDE OF GFCI DEVICE
C	COUNTER TOP MOUNTED	HG	HOSPITAL GRADE
CD	CORD DROP	R	RANGE
D	DEDICATED	TV	TELEVISION
DR	DRYER	WP	WEATHERPROOF (NEMA 3R)
DW	DISHWASHER	WR	WEATHER RESISTANCE
EWC	ELECTRIC WATER COOLER	XP	EXPLOSION PROOF
GD	GARBAGE DISPOSAL		

COMMUNICATION LEGEND

	DATA OUTLET, "#" INDICATES NUMBER OF CABLES.
	COMBINATION VOICE/DATA OUTLET, "#" INDICATES NUMBER OF CABLES
	VOICE OUTLET, "W" INDICATES WALL MOUNTED PHONE.
	FLUSH FLOOR MOUNTED VOICE/DATA FURNITURE FEED
	WALL MOUNTED VOICE/DATA FURNITURE FEED
	SYSTEMS FURNITURE FIRE-RATED FLUSH POKE-THRU TELECOMMUNICATIONS PATHWAY. COORDINATE TELECOMMUNICATIONS REQUIREMENTS PRIOR TO ROUGH IN
	RECESSED FLUSH FLOOR VOICE/DATA OUTLET "#" INDICATES NUMBER OF CABLES.
	SPEAKER HORN
	WALL MOUNTED VOLUME CONTROL. MOUNTING HEIGHT 18" A.F.F.
	SPEAKER
	TELEVISION MONITOR
	WIRELESS ACCESS POINT, POWER OVER IP, FURNISHED BY OTHERS WIRED BY E.C.
	CABLE TRAY
	DEMARC SERVICE ENTRANCE BOX
	RESCUE ASSISTANCE CONTROL PANEL
	RESCUE ASSISTANCE POWER SUPPLY
	RESCUE ASSISTANCE PHONE
	TELEPHONE BACKBOARD
	TELECOMMUNICATIONS RACK
	TELECOMMUNICATIONS CABINET
	IN-RACK UPS
	WALL MOUNTED RACK CABINET

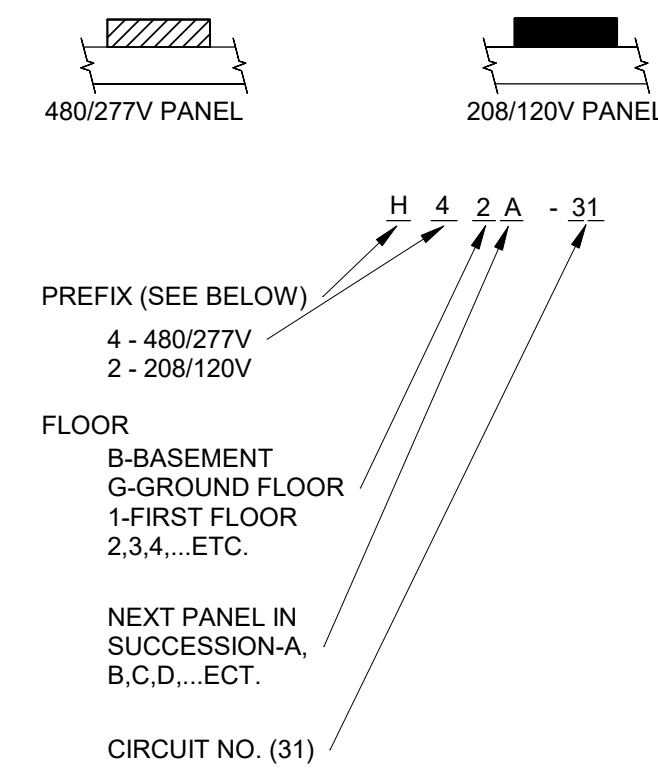
COMMUNICATION LEGEND NOTES:

- UNLESS OTHERWISE NOTED E.C. TO PROVIDE SINGLE GANG PLASTER RING AT DEVICE SYMBOL LOCATION AND PROVIDE A PULLSTRING TO NEAREST ACCESSIBLE POINT ONLY.

LEGEND NOTES:

- NOT ALL SYMBOLS SHOWN ON THIS DRAWING MAY BE USED ON PROJECT. SEE FLOOR PLANS FOR QUANTITIES AND LOCATIONS.

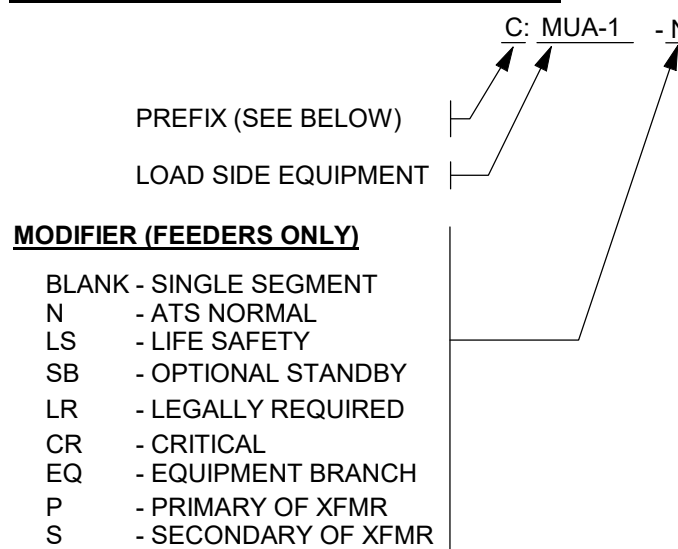
PANEL BOARD SYMBOL KEY



PANEL PREFIX LISTING

CB	- CRITICAL BRANCH
DP	- DISTRIBUTION PANEL
EQ	- EQUIPMENT BRANCH
H	- HVAC BRANCH
HP	- HOUSE PANEL
L	- LIGHTING BRANCH
LS	- LIFE SAFETY BRANCH
LR	- LEGALLY REQUIRED
M	- MECHANICAL BRANCH
P	- POWER BRANCH
SB	- STAND-BY BRANCH
T	- TENANT

ONE LINE PREFIX KEY



ONE LINE PREFIX LISTING

ATS	- AUTOMATIC TRANSFER SWITCH
BD	- BUSDUCT
C	- CONDUIT AND CONDUCTORS
CB	- CIRCUIT BREAKER
F	- FUSES IN DISCONNECT SWITCH
G	- GENERATOR
INV	- INVERTER
M	- MOTOR LOAD
MCB	- MAIN CIRCUIT BREAKER
PV	- PHOTOVOLTAIC SYSTEM
SW	- DISCONNECT SWITCH
T	- TRANSFORMER
UPS	- UNINTERRUPTIBLE POWER SUPPLY
UT	- UTILITY SOURCE

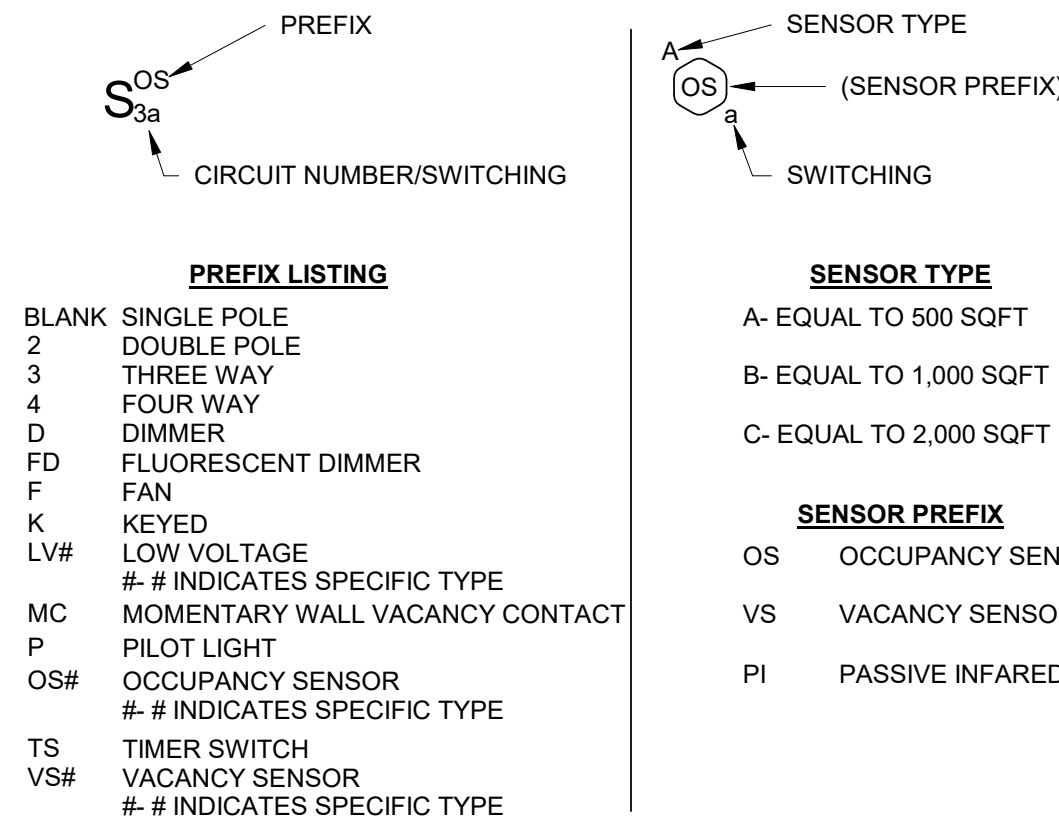
LIGHTING LEGEND

A	1a	A - INDICATES LUMINAIRE TYPE ON NORMAL CIRCUIT (SEE SCHEDULE) 1a - INDICATES CIRCUIT NUMBER/SWITCHING
A	1NL	A - INDICATES LUMINAIRE TYPE ON NORMAL CIRCUIT (SEE SCHEDULE) 1NL - INDICATES CIRCUIT NUMBER/CONSTANTLY ENERGIZED LUMINAIRE WILL DE-ENERGIZE ON LOSS OF NORMAL POWER
AE	1a	AE - INDICATES LUMINAIRE TYPE ON LIFE SAFETY SOURCE (SEE SCHEDULE) 1a - INDICATES LIFE SAFETY CIRCUIT NUMBER/ BYPASSED SWITCHING 1NL - INDICATES LIFE SAFETY CIRCUIT NUMBER/CONSTANTLY ENERGIZED LUMINAIRE WILL ENERGIZE ON LOSS OF NORMAL POWER
⊖		SURFACE, RECESSED, OR PENDANT MOUNTED LINEAR 1'x4', 2'x2' AND 2'x4' LIGHTING LUMINAIRE (SEE SCHEDULE), FOR EXACT MOUNTING AND LENGTHS REFER TO FLOOR PLANS AND/OR DETAILS.
○		ROUND WALL WASHER LUMINAIRE
○		ROUND SURFACE, RECESSED, OR PENDANT MOUNTED LUMINAIRE
—		STRIP LUMINAIRE
▽		TRACK LIGHTING. LENGTH AND NUMBER OF TRACK HEADS AS INDICATED ON THE DRAWINGS
⊖		WALL MOUNTED LUMINAIRE
⊖		LOADING DOCK LIGHT
⊕		BOLLARD WITH LIGHT
⊖		WALL MOUNTED EXIT LIGHT. ARROW (IF SHOWN), INDICATES DIRECTION OF EGRESS. FILL INDICATES NUMBER OF FACES
⊖		CEILING OR PENDANT MOUNTED EXIT LIGHT. ARROW (IF SHOWN), INDICATES DIRECTION OF EGRESS. FILL INDICATES NUMBER OF FACES
⊖		EXIT LIGHT WITH DUAL HEADS, ARROWS (IF SHOWN) INDICATE DIRECTION OF EGRESS. FILL INDICATES NUMBER OF FACES.
EB		EMERGENCY DUAL HEAD BATTERY UNIT
⊖		REMOTE MOUNTED EMERGENCY LIGHTING DUAL HEAD UNIT
EB		BATTERY UNIT FOR REMOTE EMERGENCY LIGHTING
DR		DARK ROOM IN-USE LUMINAIRE
AIR		ON AIR IN-USE LUMINAIRE
⊖		SITE POLE MOUNTED LUMINAIRE
⊖		WALL PACK LUMINAIRE
▽		FLOOD LIGHT
INV		EMERGENCY LIGHTING INVERTER

LIGHTING CONTROL LEGEND

S	SWITCH (SEE PREFIX LISTING)
BR	EMERGENCY LIGHTING BYPASS RELAY
RCM	RELAY CONTROL MODULE
#	
PP	LINE VOLTAGE / LOW VOLTAGE POWER PACK
PP2	LINE VOLTAGE / LOW VOLTAGE DUAL RELAY POWER PACK
A	
OS _a	CEILING MOUNTED SENSOR (SEE COVERAGE AREA FOR MODIFICATION)
T _c	TIME CLOCK
P	
Z#	PHOTO-CELL/DAYLIGHT SENSOR #- # INDICATES SPECIFIC ZONE
LCC	LIGHTING CONTROL CONVERTER OR COUPLER

LIGHTING CONTROL DESIGNATION KEY



Revised

No.	Date	Description
-----	------	-------------

Newport Community
Center
NEWPORT, NH

Proj. No: - Drawn: CS
Date: 01/31/2019 Chk'd: -

LEGEND,
SYMBOLS AND
GENERAL
NOTES

E0.2

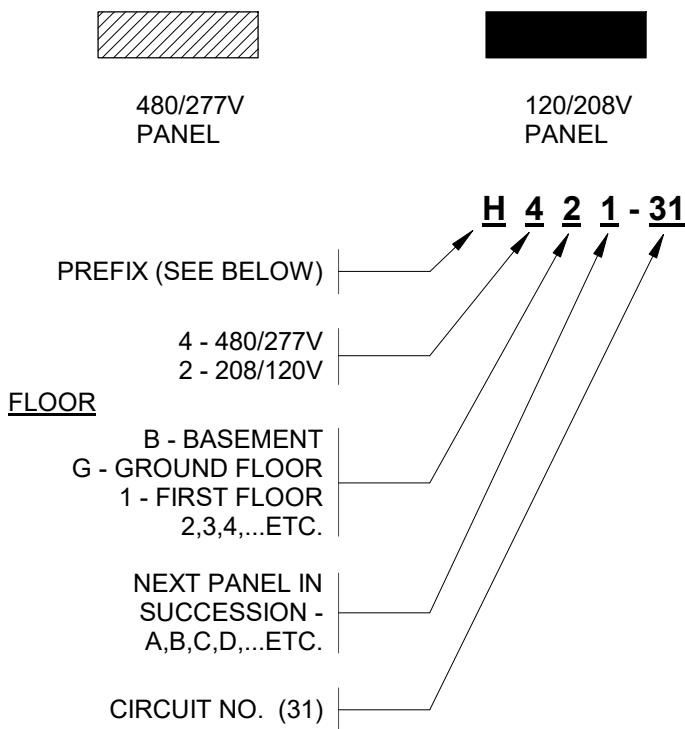
COMMUNICATION LEGEND

- # VOICE AND/OR DATA OUTLET, "#" INDICATES NUMBER OF CABLES
- W VOICE OUTLET, "W" INDICATES WALL MOUNTED PHONE
- FLUSH FLOOR MOUNTED VOICE/DATA FURNITURE FEED
- WALL MOUNTED VOICE/DATA FURNITURE FEED
- SYSTEMS FURNITURE FIRE-RATED FLUSH POKE-THRU
TELECOMMUNICATIONS PATHWAY, COORDINATE
TELECOMMUNICATIONS REQUIREMENTS PRIOR TO ROUGH IN.
- RECESSED FLUSH FLOOR VOICE/DATA OUTLET "#" INDICATES
NUMBER OF CABLES.
- SPEAKER HORN
- WALL MOUNTED VOLUME CONTROL, MOUNTING HEIGHT 18" A.F.F.
- SPEAKER
- TELEVISION MONITOR
- WIRELESS ACCESS POINT, POWER OVER IP, FURNISHED BY OTHERS,
WIRED BY E.C.
- CABLE TRAY

COMMUNICATION LEGEND NOTES

1. UNLESS OTHERWISE NOTED, E.C. TO PROVIDE SINGLE GANG PLASTER
RING AT DEVICE SYMBOL LOCATION AND PROVIDE A PULL STRING TO
NEAREST ACCESSIBLE POINT ONLY.

PANEL BOARD SYMBOL KEY



PANEL PREFIX LISTING

- CB - CRITICAL BRANCH
- DP - DISTRIBUTION PANEL
- EQ - EQUIPMENT BRANCH
- H - HVAC BRANCH
- HP - HOUSE PANEL
- L - LIGHTING BRANCH
- LS - LIFE SAFETY BRANCH
- LR - LEGALLY REQUIRED
- M - MECHANICAL BRANCH
- P - POWER BRANCH
- SB - STAND-BY PANEL
- T - TENANT

DISCLAIMER:

THIS DRAWING SET IS THE BASIS OF A DESIGN-BUILD PERFORMANCE
BY INTERSTATE ELECTRIC INC. (IES) ONLY AND IS NOT INTENDED TO
BE USED BY ANY INDIVIDUAL OR COMPANY OTHER THAN IES AS A
BASIS OF DESIGN AND/OR BUILD ACTIVITIES FOR THIS OR ANY OTHER
PROJECT. UTILIZATION OF THIS DRAWING SET AND ANY DRAWINGS
OR OTHER ASSOCIATED DOCUMENTS PREPARED BY OTHER
INDIVIDUAL OR COMPANY SHALL RENDER THEM NULL AND VOID, AND
RELIEVE IES FROM ANY AND ALL LIABILITIES AND/OR DAMAGES OF
ANY NATURE THAT MAY ENSUE FROM UNAUTHORIZED USE. IF YOU
HAVE ANY QUESTIONS OR NEED ANY FURTHER ASSISTANCE, PLEASE
DO NOT HESITATE TO CONTACT (IES) AT (855) 500-4372.

01/31/2019

DESIGN DEVELOPMENT

Revised

No.	Date	Description
-----	------	-------------

Newport Community
Center
NEWPORT, NH

Proj. No: - Drawn: CS
Date: 1/31/2019 Chk'd: MW

SITE PLAN

E1.0

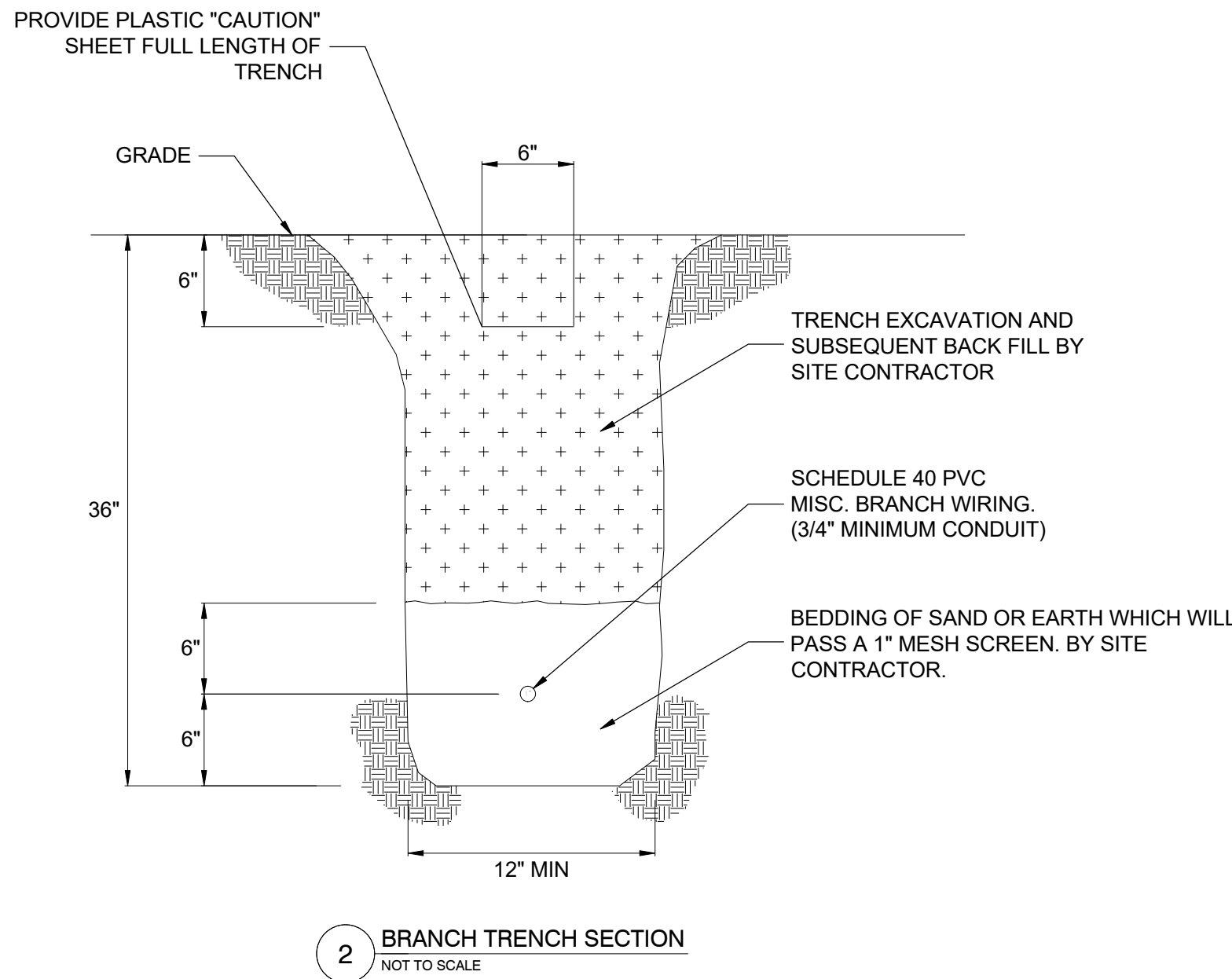
SITE PLAN NOTES	
1	NEW POLE MOUNTED SITE LIGHTING LUMINAIRE(S), NEW CONCRETE POLE BASES AS REQUIRED TO BE PROVIDED BY OTHERS, PROVIDE NEW UNDERGROUND CONDUITS, BRANCH WIRING AND LIGHTING CONTROLS AS REQUIRED.
2	BUILDING MOUNTED SITE LIGHT LUMINAIRE TYPE W1, MOUNTED APPROXIMATELY AT 12'-0" AFG, COORDINATE FINAL LOCATION WITH ARCHITECT. PROVIDE BRANCH CIRCUIT WIRING AND CONTROL AS REQUIRED. REFER TO LIGHTING PLAN AND LUMINAIRE FIXTURE SCHEDULE.
3	LEVEL 1 ELECTRIC VEHICLE LOCATION, RUN (2)#-, (1)#-G IN 1" CONDUIT FROM 20A2P BREAKER IN PANEL XXX
4	LEVEL 2 ELECTRIC VEHICLE LOCATION, RUN (4)#-, (1)#-G-, VIA 1" CONDUIT FOR DUAL OUTPUT CHARGER. EACH SET OF (2)#- FED VIA 40A2P BREAKER IN PANEL XXX. SWEEP CONDUIT UP INTO BOTTOM OF CHARGER. PROVIDE ADDITIONAL 1" CONDUIT WITH CAT6 CABLE BACK TO DATA ROOM.

SITE PLAN GENERAL NOTES:

- SITE LIGHTING DESIGN WAS PROVIDED BY SWANEY LIGHTING. REFER TO LIGHTING FIXTURE SCHEDULE FOR INFORMATION.
- EXCAVATION, BACKFILLING, PAVING AS REQUIRED FOR UNDERGROUND CONDUIT TRENCHES AS WELL AS ANY MOUNTING PADS FOR UTILITY EQUIPMENT SHALL BE PROVIDED, FURNISHED AND INSTALLED BY THE SITE CONTRACT. EXCAVATION OF UTILITIES TO BE COORDINATED WITH ALL STRUCTURES/EXISTING CONDITIONS. REFER TO CIVIL SITE PLAN(S).
- REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL POWER, LIGHTING, ELECTRICAL DISTRIBUTION EQUIPMENT REQUIREMENTS, LOCATIONS AND INFORMATION.
- ALL WORK RELATED TO UTILITY SERVICES SHALL BE COORDINATED WITH THE SERVICE PROVIDER AS REQUIRED.
- PROVIDE (2) 4" AND (1) 3" SCHED. 40 PVC TELECOMMUNICATIONS AND CABLE TELEVISION SERVICE CONDUIT(S) FROM THE NEW UTILITY POLE TO NEW DEMARCATION POINT. SERVICE EQUIPMENT, CABLE, CABLE TERMINATIONS AND ALL WORK ASSOCIATED WITH THE TELECOMMUNICATIONS AND CABLE TELEVISION SERVICE ENTRANCE SHALL BE FURNISHED AND INSTALLED BY OTHERS.
- AVAILABLE FAULT CURRENT AT THE SERVICE ENTRANCE IS ESTIMATED TO BE LESS THAN X AMPS AT 120-208 VOLTS RMS SYMETRICAL. X RATE MAIN PANEL XXXX. VERIFY AND COORDINATE ACTUAL AVAILABLE FAULT CURRENT WITH UTILITY COMPANY AND DESIGN ENGINEER PRIOR TO RELEASE OF EQUIPMENT.
- PROVIDE NEW POLE MOUNTED SITE LUMINAIRES AS SHOWN ON SITE PLAN WITH BRANCH WIRING AND CONTROL AS NOTED. CONCRETE POLE BASE(S) AS REQUIRED FOR NEW POLE MOUNTED SITE LIGHTING FIXTURES SHALL BE PROVIDED BY OTHERS. COORDINATE MOUNTING MOUNTING HEIGHTS OF BUILDING MOUNTED SITE LUMINAIRES WITH ARCHITECTURAL BUILDING ELEVATION DRAWINGS.

1 Electrical Site Plan
1" = 20'-0"

DESIGN DEVELOPMENT



Approximate Boundary From Tax Map

APPROXIMATE LOCATION OF NEW XXXAMP-120/208 VOLT-3P-3W ELECTRICAL SERVICE ENTRANCE (UTILITY METER AND MAIN DISC. SWITCH "MDS")

APPROXIMATE LOCATION OF NEW UTILITY RISER POLE AND POLE MOUNTED TRANSFORMERS (PROVIDED BY UTILITY CO.)

Approximate Boundary From Tax Map

Approximate Boundary From Tax Map

Approximate Boundary From Tax Map

Meadow Rd

DUGOUT

DUMPSTER

1/31/2019

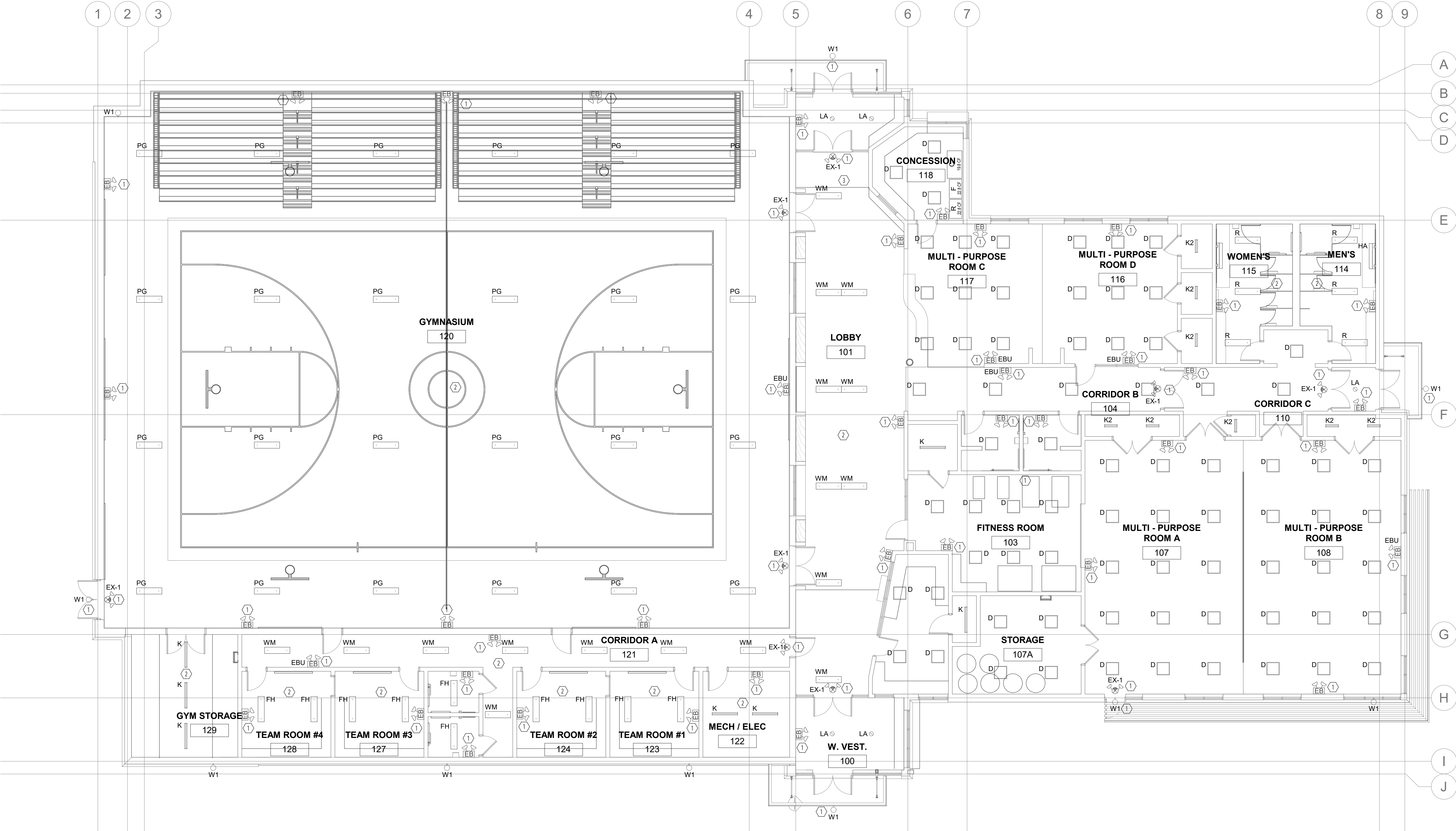
FEEDER SIZES - COPPER CONDUCTORS			
FEEDER SYMBOL	CONDUCTORS 3-PHASE 3-WIRE WITH GROUND	CONDUCTORS 3-PHASE 4-WIRE WITH GROUND	NORMAL AMPERE RATING
<div>60</div> <div>X</div>	3#6 & 1#10 GND, 3/4" C.	4#6 & 1#10 GND, 1" C.	60
<div>70</div> <div>X</div>	3#4 & 1#8 GND, 1" C.	4#4 & 1#8 GND, 1-1/4" C.	70
<div>100</div> <div>X</div>	3#3 & 1#8 GND, 1-1/4" C.	4#3 & 1#8 GND, 1-1/4" C.	100
<div>125</div> <div>X</div>	3#1&1#6 GND, 1-1/2" C.	4#1 & 1#6 GND, 1-1/2" C.	125
<div>150</div> <div>X</div>	3#1/0 & 1#6 GND, 1-1/2" C.	4#1/0 & 1#6 G, 2" C.	150
<div>175</div> <div>X</div>	3#2/0 & 1#6 GND, 2" C.	4#2/0 & 1#6 GND, 2" C.	175
<div>200</div> <div>X</div>	3#3/0 & 1#6 GND, 2" C.	4#3/0 & 1#6 GND, 2" C.	200
<div>225</div> <div>X</div>	3#4/0 & 1#4 GND, 2" C.	4#4/0 & 1#4 GND, 2-1/2" C.	225
<div>250</div> <div>X</div>	3#250MCM & 1#4 GND, 2-1/2" C.	4#250MCM & 1#4GND, 2-1/2" C.	250
<div>300</div> <div>X</div>	3#350MCM & 1#4 GND, 2-1/2" C. OR (2) 3#1/0 & 1#4 GND 1 1/2" C.	4#350MCM & 1#4 GND, 3" C. OR (2) 4#1/0 & 1#4 GND, 2" C.	300
<div>350</div> <div>X</div>	3#500MCM & 1#3 GND, 3" C. OR (2) 3#2/0 & 1#3 GND 2" C.	4#500MCM & 1#3 GND, 3" C. OR (2) 4#2/0 & 1#3 GND, 2" C.	350
<div>400</div> <div>X</div>	3#500MCM & 1#3 GND, 3" C. OR (2) 3#3/0 & 1#3 GND, 2" C.	4#500MCM & 1#3 GND, 3" C. OR (2) 4#3/0 & 1#3 GND, 2" C.	400
<div>500</div> <div>X</div>	(2) 3#250MCM & 1#2 GND, 2-1/2" C. OR (3) 3#2/0 & 1#2 GND 2" C.	(2) 4#250MCM & 1#2GND, 2-1/2" C. OR (3) 4#2/0 & 1#2 GND, 2" C.	500
<div>600</div> <div>X</div>	(2) 3#350MCM & 1#1 GND, 2-1/2" C. OR (3) 3#3/0 & 1#1 GND, 2" C.	(2) 4#350MCM & 1#1 GND, 3" C. OR (3) 4#3/0 & 1#1 GND, 2" C.	600
<div>700</div> <div>X</div>	(2) 3#500MCM & 1#1/0 GND, 3" C.	(2) 4#500MCM & 1#1/0 GND, 3" C.	700
<div>800</div> <div>X</div>	(3) 3#300MCM & 1#1/0 GND, 2-1/2" C. (4) 3#3/0 & 1#1/0 GND, 2" C.	(3) 4#300MCM & 1#1/0 GND, 2-1/2" C. (4) 4#3/0 & 1#1/0 GND, 2" C.	800
<div>1000</div> <div>X</div>	(3) 3#400MCM & 1#2/0 GND, 2-1/2" C.	(3) 4#400MCM & 1#2/0 GND, 3" C.	1000
<div>1200</div> <div>X</div>	(4) 3#350MCM & 1#3/0 GND, 2-1/2" C.	(4) 4#350MCM & 1#3/0 GND, 3" C.	1200
<div>1600</div> <div>X</div>	(5) 3#400MCM & 1#4/0 GND, 2-1/2" C.	(5) 4#400MCM & 1#4/0 GND, 3" C.	1600
<div>2000</div> <div>X</div>	(5) 3#600MCM & 1#250 GND, 3" C.	(5) 4#600MCM & 1#250 GND, 3-1/2" C.	2000
UNDERGROUND SECONDARY CONDUCTORS - FROM PAD MOUNT XMFR TO MAIN OCPD ONLY			
<div>2500</div> <div>X</div>	(6) 3#600MCM 4" C PVC.	(6) 4#600MCM 4" C PVC.	2500
<div>3000</div> <div>X</div>	(8) 3#500MCM 4" C PVC.	(8) 4#500MCM 4" C PVC.	3000
<div>3200</div> <div>X</div>	(8) 3#600MCM 4" C PVC.	(8) 4#600MCM 4" C PVC.	3200
<div>4000</div> <div>X</div>	(10) 3#600MCM 4" C PVC.	(10) 4#600MCM 4" C PVC.	4000

1. NFPA-70-2014 TABLES 310-15 (B) (16)
2. GROUNDING CONDUCTOR BASED ON NFPA-70-2014 TABLE 250-122
3. UTILIZE NFPA-70-2014 CHAPTER 9 TABLES FOR EXACT CONDUIT AND FILL VALUES
4. CONDUIT SIZES SHOWN ABOVE ARE BASED ON EMT & PVC-SCH 40 PER NFPA 70-2014 INFORMATIVE ANNEX C. CONDUITS REQUIRING A LARGER PVC-SCH 40 CONDUIT SIZE THAN EMT SIZE IS NOTES ABOVE.
5. THHN, THWN-2 INSULATION TYPE USED FOR CALCULATION UNLESS OTHERWISE NOTED.
6. FEEDER SIZES ABOVE DO NOT TAKE INTO CONSIDERATION DERATING, TEMPERATURE BEYOND AMBIENT 30°C, OR VOLTAGE DROP.

ONE-LINE DIAGRAM NOTES:

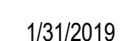
1. REFER TO LEGEND AND SYMBOLS DRAWING FOR SYMBOL IDENTIFICATION.
2. REFER TO TRANSFORMER SCHEDULE AND FEEDER SIZE SCHEDULE ON THIS DRAWING.
3. ALL ITEMS SHOWN AS GREY / THIN LINE TO BE EXISTING TO REMAIN.
4. ALL CIRCUIT BREAKERS 1000A OR LARGER TO BE PROVIDED WITH ARC FLASH MITIGATION AND GFI PROTECTION.
5. ALL CIRCUIT BREAKERS, DISCONNECT SWITCHES, PANELBOARDS, SWITCHBOARDS, AND ATS SWITCHES SHALL BE FULLY RATED TO THE INDICATED FAULT CURRENT. SERIES RATING IS NOT ACCEPTABLE UNLESS OTHERWISE NOTED.
6. GROUND SWITCH BOARD PER NEC ART 250, PROVIDE COUNTER POISE WITH #250 KcMIL E.C.G.
7. FOR PROJECTS THAT REQUIRE A NEW ELECTRICAL SERVICE, UNLESS OTHERWISE NOTED ALL EXCAVATION, BACKFILL, CONCRETE ENCASEMENT, TRANSFORMER CONCRETE PADS AND BOLLARDS TO BE FURNISHED AND INSTALLED BY OTHERS. ALSO ALL ELECTRICAL UTILITY COMPANY BACKCHARGES FOR NEW UTILITY WORK/UPGRADES AND UTILITY DESIGN/ENGINEERING FEES TO BE BY OTHERS.
8. FOR PROJECTS THAT REQUIRE A NEW GENERATOR, UNLESS OTHERWISE NOTED GENERATOR CONCRETE PAD, EXCAVATION, BACKFILL AND FUEL TO BE FURNISHED BY OTHERS. IF GENERATOR IS GAS OR PROPANE, PLUMBING CONTRACTOR TO PROVIDE PROPERLY SIZED GAS LINE AND PRESSURE TO OPERATE GENERATOR. IF GENERATOR IS GROUND MOUNTED, GENERATOR TO BE PROPERLY SPACED FROM PADMOUNT TRANSFORMER(S) PER NFPA 37. (EVERSOURCE REQUIRES 25FT FOR BOTH GAS & DIESEL, NATIONAL GRID REQUIRES 25FT FOR GAS AND 10FT FOR DIESEL.)
9. PROVIDE A 2-POLE SPACE IN MAIN ELECTRICAL SERVICE PANEL TO ALLOW FOR INSTALLATION OF A DUAL POLE CIRCUIT BREAKER FOR FUTURE SOLAR ELECTRIC INSTALLATION. SPACE TO BE LABELED "FOR FUTURE SOLAR ELECTRIC.
10. FOR ELECTRICAL EQUIPMENT THAT IS RATED FOR 800A AND LARGER AND IS OVER SIX FEET WIDE ONE DOOR THAT SWINGS TO THE DIRECTION OF EGRESS WITH PANIC HARDWARE IS REQUIRED.
FOR ELECTRICAL EQUIPMENT THAT IS RATED FOR 1,200A AND LARGER AND IS OVER SIX FEET WIDE REQUIRES TWO DOORS THAT SWING TO THE DIRECTION OF EGRESS WITH PANIC HARDWARE.
11. ALL LIFE SAFETY CIRCUIT BREAKERS FOR NORMAL AND EMERGENCY POWER SHALL BE SELECTIVELY COORDINATED PER NFPA 70, ARTICLE 700.
12. ALL PANELBOARDS, SWITCHBOARDS, TRANSFORMERS, ATS SWITCHES, GENERATORS, AND ELECTRICAL EQUIPMENT SHALL BE SIESMIC RATED PER THE MASSACHUSETTS STATE BUILDING CODE.
13. ALL ATS SWITCHES SHALL BE RATED TO THE INDICATED AIC RATING AS FOLLOWS: (VERIFICATION SHALL BE PROVIDED BY VENDOR WITH BILL OF MATERIAL)
 - THE "ANY CIRCUIT BREAKER" RATING SHALL BE DOCUMENTED TO THE MINIMUM AIC RATING NOTED OR
 - COORDINATE AND PROVIDE "SPECIFIC CIRCUIT BREAKER" REQUIRED TO OBTAIN MINIMUM AIC RATED NOTED OR
 - PROVIDED CURRENT LIMITING FUSED DISCONNECT SWITCHES AT ATS SWITCHES, FUSES NEED TO BE INCLUDED IN THE SELECTIVE COORDINATION REQUIRED BY NOTE 1 ABOVE.
14. ELECTRICAL PANELBOARDS THAT FEED LEGALLY REQUIRED STANDBY SYSTEMS (LRSS) OR LIFE SAFETY SYSTEMS SHALL BE PROVIDED AS FUSED PANELBOARDS WITHOUT CIRCUIT BREAKERS. ALL BRANCH WIRING TO BE POWERED FROM BRANCH FUSED SWITCHES.
15. PROVIDE GFPE / GROUND-FAULT PROTECTION OF EQUIPMENT CIRCUIT BREAKERS PER FLOOR PLANS AND PANEL SCHEDULES.
16. FURNISH AND INSTALL NAMEPLATES ON ALL ELECTRICAL EQUIPMENT INCLUDING PANELS, JUNCTION BOXES, DISCONNECT SWITCHES, TRANSFORMERS AND STARTERS. NAMEPLATES SHALL INDICATE EQUIPMENT TAG, VOLTAGE CHARACTERISTICS AND SOURCE OF POWER.
17. SAFETY DISCONNECT SWITCHES SHALL BE THREE-POLE GENERAL USE RATED FOR 250 VOLT OR LESS AND HEAVY DUTY TYPE RATED FOR OVER 250 VOLT. DISCONNECT SHALL BE MINIMUM NEMA 1 ENCLOSURES (INTERIOR DRY APPLICATIONS) AND NEMA 3R ENCLOSURES (EXTERIOR APPLICATIONS) UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL SWITCHES SHALL BE HORSEPOWER RATED AND SUITABLE FOR USE. PROVIDE WITH SOLID NEUTRAL BLOCK IN DISCONNECT WHERE NEUTRAL CONDUCTOR TERMINATION IS REQUIRED.
18. PANEL BOARDS SHALL BE CIRCUIT BREAKER TYPE WITH THERMAL MAGNETIC BOLT ON MOLDED CASE CIRCUIT BREAKERS. MINIMUM INTERRUPTING CAPACITY SHALL BE 10,000 AMPS SYMMETRICAL AT 208 VOLT AND 14,000 AIC AT 480 VOLT. REFER TO PANEL SCHEDULES FOR EXACT AIC RATINGS OF EQUIPMENT. PANELBOARD COVERS SHALL BE DOOR-IN-DOOR DESIGN. ACCEPTABLE MANUFACTURERS SHALL BE SQUARE D, GE, SIEMENS, AND EATON CUTLER HAMMER.
19. PROVIDE DRY TYPE TRANSFORMERS WHICH MEET NEMA NO. ST20-2014, TP-1, LATEST D.O.E. 10CFR 431.192 ENERGY EFFICIENCY STANDARDS, AND UL STANDARDS. TRANSFORMERS SHALL HAVE 220°C., INSULATION SYSTEM RATED FOR CONTINUOUS OPERATION AT RATED KVA. TRANSFORMERS TEMPERATURE RISE SHALL NOT EXCEED 120°C. TRANSFORMERS SHALL HAVE TWO ALUMINUM WINDINGS, CONTINUOUS WOUND CONSTRUCTION. TRANSFORMER PRIMARY SHALL BE PROVIDED WITH (6) 5% TAPS. K13 RATED TRANSFORMERS SHALL HAVE 200 NEUTRALS AND AN ELECTROSTATIC SHIELD WITH NOISE ATTENUATION LOADS OF 120db COMMON MODE AND 30db NORMAL MODE.

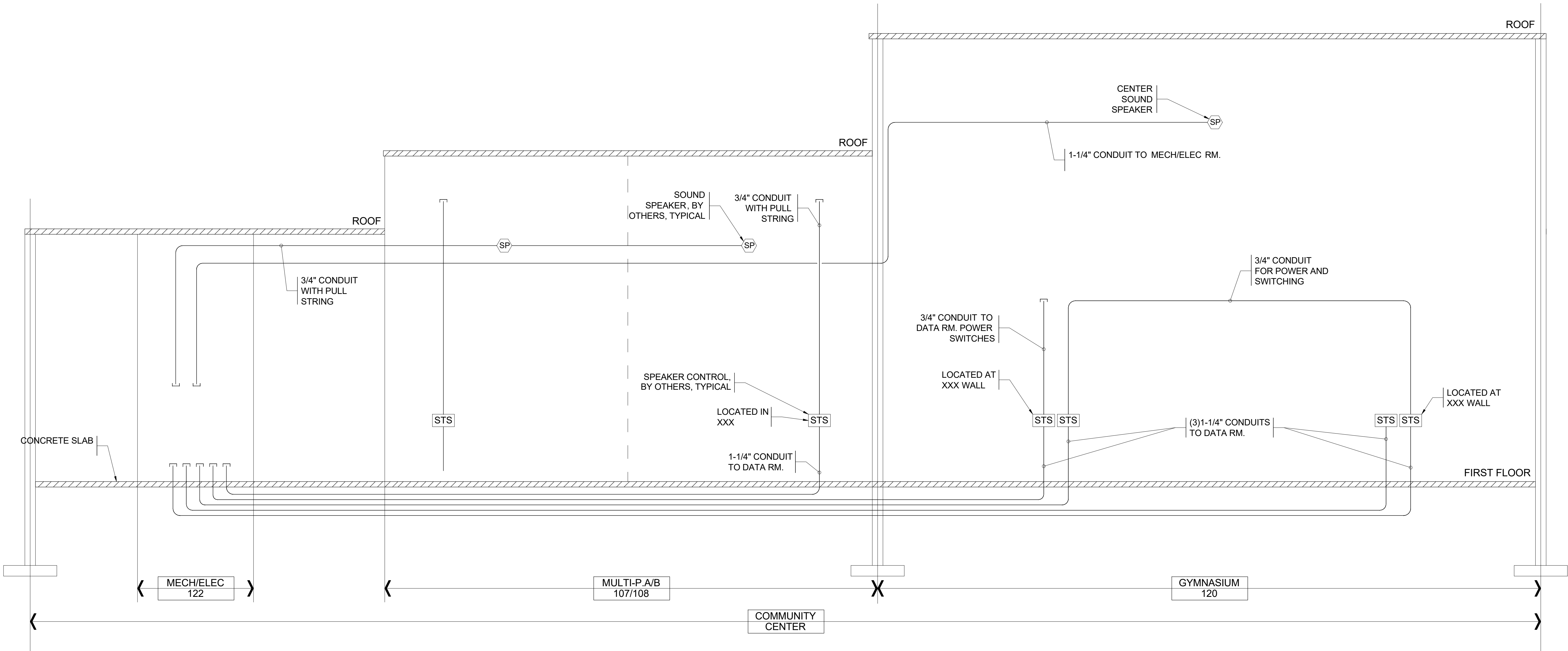
LIGHTING PLAN NOTES	
NO.	DESCRIPTION
1	SELF-CONTAINED UNIT EXIT SIGNS, EMERGENCY BATTERY UNITS, AND EMERGENCY DRIVERS TO BE CONNECTED TO LOCAL AREA LIGHTING CIRCUITS AHEAD OF ALL SWITCHING CONTROLS, IN ACCORDANCE WITH 2017 NEC SECTION 700.12(F)(2)(3)
2	LUMINAIRES AND CEILING MOUNTED LIGHTING CONTROL DEVICES IN THIS SPACE SHALL BE SUSPENDED FROM THE EXPOSED BUILDING STRUCTURE ABOVE. COORDINATE FINAL LOCATIONS, MOUNTING REQUIREMENTS AND SUSPENSION HEIGHTS WITH WORK OF THE OTHER TRADES PRIOR TO ROUGH-IN.
3	COORDINATE AND VERIFY FINAL LOCATION OF LUMINAIRE IN FIELD WITH THE CONSTRUCTION MANAGER PRIOR TO ROUGH-IN



1 L1 - Lighting Plan
1/8" = 1'-0"

1/31/2019














































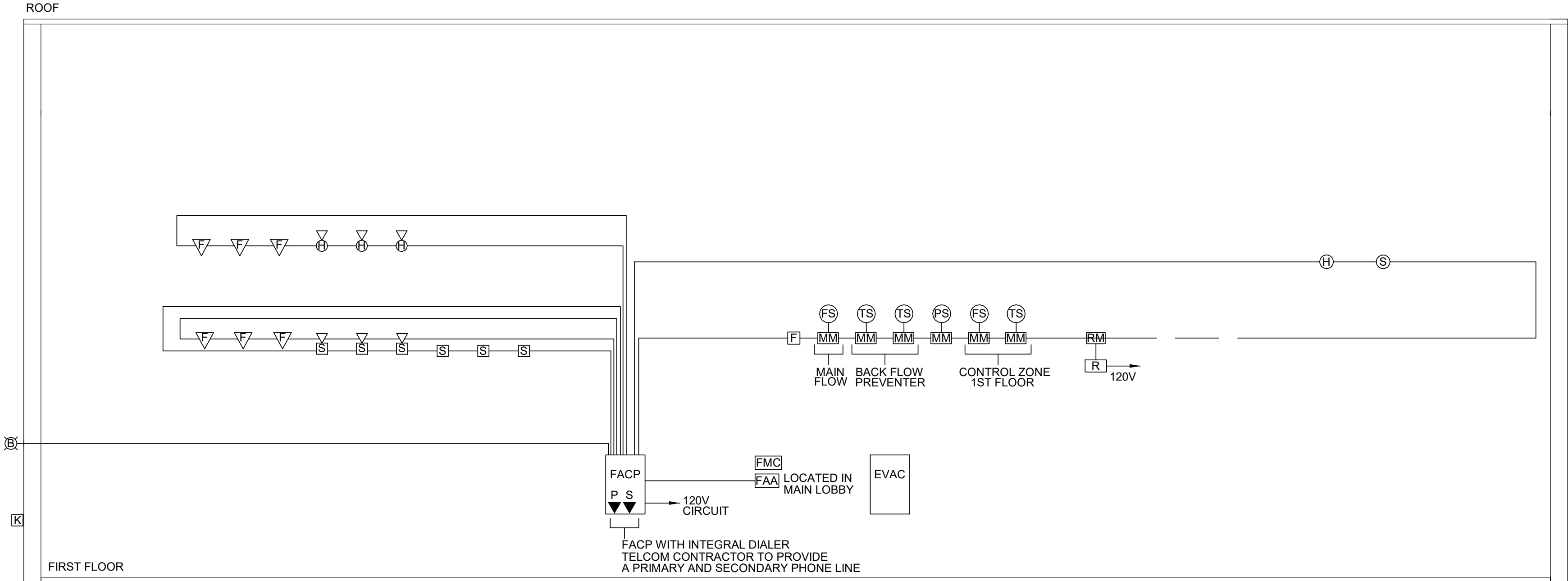
1 Gymnasium Sound System Riser Diagram

NOTE:

- 1.) PROVIDE SLEEVES FOR ALL PENETRATIONS OF RATED WALLS AND FLOORS. SLEEVES THROUGH FIRE-RATED WALLS, SHAFTS, FLOOR AND PARTITIONS SHALL BE PACKED FULL LENGTH WITH UL LISTED FILL TO MAINTAIN THE RATING OF SEPARATION. COMPLY WITH NFPA REQUIREMENTS.

FIRE ALARM LEGEND

	FIRE ALARM MASTER BOX
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM TERMINAL CABINET
	FIRE ALARM POWER SUPPLY
	KEY ACCESS BOX
	EXTERIOR SIGNAL BEACON
	FIRE ALARM MANUAL PULL STATION
	WALL MOUNTED HORN ONLY ("LF" INDICATES LOW FREQUENCY)
	WALL MOUNTED FIRE ALARM HORN-STROBE LIGHT, NUMERAL DENOTES CANDELA RATING "LF", IF SHOWN INDICATES LOW FREQUENCY
	CEILING MOUNTED FIRE ALARM HORN-STROBE LIGHT, NUMERAL DENOTES CANDELA RATING
	WALL MOUNTED SPEAKER ONLY
	WALL MOUNTED FIRE ALARM SPEAKER-STROBE LIGHT, NUMERAL DENOTES CANDELA RATING
	CEILING MOUNTED FIRE ALARM SPEAKER-STROBE LIGHT, NUMERAL DENOTES CANDELA RATING
	STROBE LIGHT, NUMERAL DENOTES CANDELA RATING
	CEILING MOUNTED STROBE LIGHT, NUMERAL DENOTES CANDELA RATING
	HEAT DETECTOR
	FIREFIGHTER'S TELEPHONE JACK
	FIREFIGHTER'S TELEPHONE STORAGE CABINET
	FLOW SWITCH (FURNISHED AND INSTALLED BY OTHERS)
	TAMPER SWITCH (FURNISHED AND INSTALLED BY OTHERS)
	PRESSURE SWITCH (FURNISHED AND INSTALLED BY OTHERS)
	INDUCT SMOKE DETECTOR (INSTALLED BY OTHERS, WIRED BY EC)
	SMOKE DETECTOR "C" INDICATES COMBINATION CARBON MONOXIDE "E" INDICATES ELEVATOR RECALL
	SOUNDER BASE SMOKE DETECTOR "C" INDICATES COMBINATION CARBON MONOXIDE "E" INDICATES ELEVATOR RECALL
	CARBON MONOXIDE DETECTOR
	REMOTE TEST STATION WITH INDICATOR LIGHT
	REMOTE ALARM INDICATOR
	FIRE ALARM BELL (INSTALLED BY OTHERS, WIRED BY EC)
	ELECTRO-MAGNETIC DOOR HOLDING DEVICE
	SYNC MODULE
	ISOLATION MODULE
	FIRE EXTINGUISHER MODULE (FIRE EXTINGUISHER BY OTHERS)
	MONITOR MODULE
	CONTROL MODULE
	RELAY MODULE
	MOTORIZED DAMPER BY OTHERS, WIRED BY E.C.
	120 VOLT NO/NC RELAY
	MULTI POLE DEFINITE PURPOSE CONTACTOR FOR FAN POWERED BOX SHUTDOWN. SEE DETAIL ON THIS DRAWING.
	FIRE ALARM GRAPHIC MAP
	FIRE ALARM MICROPHONE CABINET



FIRE ALARM RISER DIAGRAM

SCALE: NTS

FIRE ALARM NOTES:

- REFER TO FIRE ALARM LEGEND FOR SYMBOL IDENTIFICATION.
- REFER TO FIRE ALARM RISER DIAGRAM FOR INTENT OF FIRE ALARM SYSTEM.
- PROVIDE COMPLETE ADDRESSABLE FIRE ALARM SYSTEM INCLUDING CONTROL PANEL WITH DIGITAL COMMUNICATOR AS REQUIRED FOR EMERGENCY FORCES NOTIFICATION. COORDINATE NOTIFICATION REQUIREMENTS WITH LOCAL AHJ.
- PROVIDE ADJUSTABLE MULTI CANDELA NOTIFICATION DEVICE FROM 15cd TO 110cd, AND OTHER CANDELA RAITING AS REQUIRED FOR A COMPLETE SYSTEM.
- VOLTAGE DROP TO BE COORDINATED BY MANUFACTURER.
- COORDINATE WITH FIRE PROTECTION TRADE FOR DRY/WET SYSTEM. EXACT REQUIREMENTS OF MONITORING AND CONTROL POINTS SUCH AS TAMPER SWITCHES, FLOW SWITCHES, PRESSURE SWITCHES, COMPRESSORS, BELLS, FIRE PUMP CONTROLS AND SUPPRESSION SYSTEMS, PRE ACTION SYSTEMS AND SPRINKLER ZONES PRIOR TO ROUGH IN.
- PROVIDE RELAY MODULES AS REQUIRED TO INTERFACE WITH SECURITY SYSTEM AND SOUND SYSTEMS AS REQUIRED.
- COORDINATE WITH FIRE ALARM EQUIPMENT MANUFACTURER FOR REQUIRED ADDITIONAL POWER SUPPLY PANELS.
- COORDINATE LOCATION OF LOCAL EMERGENCY MASTER BOX, RADIO MASTER BOX, DIGITIZER AND/OR DIALER AND ALL ALARM, TROUBLE, AND SUPERVISORY SIGNALS WITH LOCAL FIRE DEPARTMENT PRIOR TO ROUGH IN.
- COORDINATE LOCATION OF FIRE ALARM CONTROL PANEL, RECORD DRAWING CABINET, ANNUNCIATORS AND ALL OTHER INITIATING AND NOTIFICATION DEVICES INCLUDING BUT NOT LIMITED TO REMOTE TEST STATIONS, REMOTE ALARM INDICATORS, KEY BOX, BEACON, HEAT DETECTORS, CO DETECTORS, GAS LEAK DETECTORS, SMOKE DETECTORS, DUCT SMOKE DETECTORS, AND PULL STATIONS WITH LOCAL FIRE DEPARTMENT PRIOR TO ROUGH IN.
- ALL FIRE ALARM WIRING REQUIREMENTS SHALL BE IN ACCORDANCE WITH FIRE ALARM EQUIPMENT SUPPLIER.
- ALL WIRING FOR THE FIRE ALARM SYSTEMS SHALL BE INSTALLED IN A CODE COMPLIANT MANNER.
- REFER TO APPROVED SHOP DRAWINGS FOR SEQUENCE OF OPERATIONS.
- EQUIPMENT SUPPLIER SHALL PROVIDE CALCULATIONS TO SUPPORT THE SIZE OF STANDBY BATTERIES, AMPLIFIER AND POWER SUPPLY, SIZING TO INCLUDE CIRCUIT LOADING, WIRE SIZE, VOLTAGE DROP CHARACTERISTICS AND SPARE CAPACITY.
- WHERE APPLICABLE, ADDRESSES FOR ALL FIELD DEVICES SHOWN ON FLOOR PLANS SHALL BE PROVIDED. KEY LIST SHALL INCLUDE DEVICE TYPE, ADDRESS LOCATION AND CORRESPONDING LCD MESSAGE TEST.
- AUDIBLE CIRCUITS TO BE PROVIDED AT 2 CIRCUITS PER FLOOR MINIMUM, WITH A MINIMUM OF 25% SPARE CAPACITY.
- VISUAL NOTIFICATION APPLIANCE CIRCUITS AND POWER SUPPLIES SHALL OPERATE ALL STROBES SHOWN, PLUS 25% SPARE CAPACITY.
- AUDIBLE AND VISUAL SIGNALS MAY BE COMBINED ON THE SAME CIRCUITS. CIRCUITS TO BE SIZED ACCORDINGLY WITH 25% SPARE CAPACITY.
- EQUIPMENT SUPPLIER SHALL PROVIDE THE FOLLOWING:
 - END-USER TRAINING PROGRAM.
 - SUBMIT COMPLETE DOCUMENTATION TO INCLUDE TYPE, SIZE, RATING, CATALOG NUMBER, MANUFACTURER NAMES, PHOTOS AND/OR CATALOG DATA SHEETS.
 - PROVIDE COMPLETE POINT-TO-POINT WIRING DIAGRAM SHOWING ALL EQUIPMENT, SIZE, TYPE, AND NUMBER OF ALL CONDUCTORS AND DEVICES.
 - PROVIDE LARGE SCALE DRAWINGS OF FIRE ALARM CONTROL PANEL AND REMOTE PANELS SHOWING MODULE PLACEMENT AND SPARE CAPACITY ALLOWANCES.
 - PROVIDE WIRE SIZE, VOLTAGE DROP, AND BATTERY CALCULATIONS
- PROVIDE SMOKE DETECTOR WITHIN 10 FEET OF EACH FIRE ALARM CONTROL PANEL, FIRE ALARM ANNUNCIATOR, AND NOTIFICATION APPLIANCE BOOSTER PANELS AS REQUIRED.
- FOR PROJECTS WITH ATRIUMS, LARGE VOLUME SPACES OR HIGH RISES, PROVIDE FIRE ALARM CONNECTIONS TO THE HVAC PROVIDED SMOKE CONTROL SYSTEM.
- PROVIDE RELAY MODULE AND CONTACTOR FOR FAN POWER BOX SHUTDOWN WHERE INDICATED ON THE FLOOR PLANS, OR WHEN THE FAN POWER BOXES RETURN INTO THE SAME PLENUM WITH A TOTAL COMBINED CFM THAT EXCEEDS 2000 CFM.
- REFER TO FIRE ALARM RISER DIAGRAM AND FLOOR PLANS FOR FIRE ALARM DEVICE QUANTITIES AND LOCATIONS. NOT ALL DEVICES ARE SHOWN IN BOTH LOCATIONS.
- THE FIRE ALARM SCOPE INDICATED IN THIS SET OF DOCUMENTS, INCLUDING EQUIPMENT AND DEVICES ETC. INDICATE THE DESIGN INTENT OF A FULLY FUNCTIONAL FIRE ALARM SYSTEM AND IS SUBJECT TO COORDINATION WITH THE SELECTED MANUFACTURER AND FIRE PREVENTION AHJ.

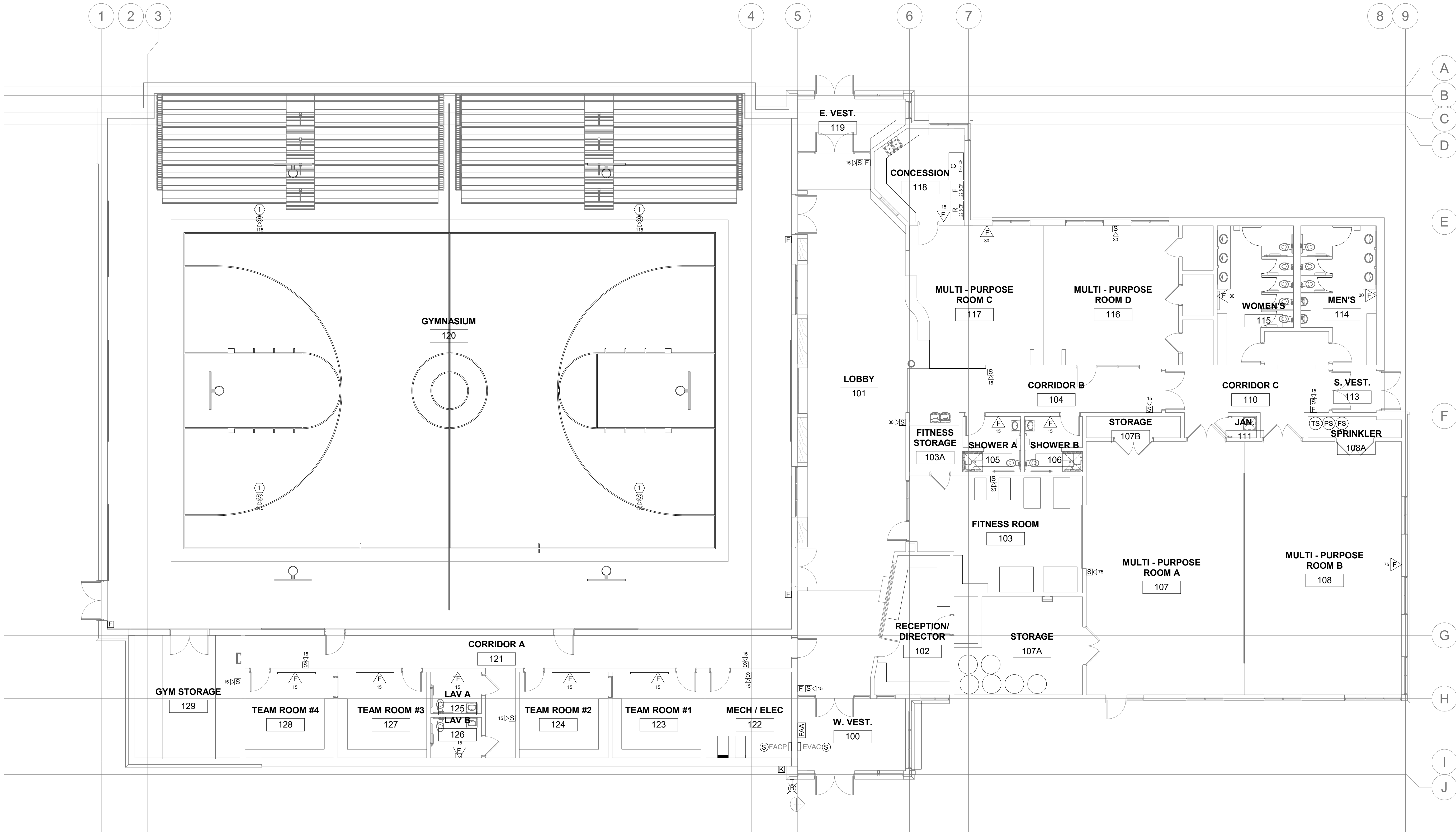
Revised		
No.	Date	Description

Newport Community
Center
NEWPORT, NH

Proj. No: - Drawn: CS
Date: 1/31/2019 Chk'd: -

FIRST FLOOR
FIRE ALARM

FIRE ALARM PLAN NOTES	
No.	Description
1	PROVIDE PROTECTIVE COVER OVER FIRE ALARM DEVICE. COORDINATE LOCATION WITH G.C. PRIOR TO DEVICE ROUGH-IN.



1 L1 - Fire Alarm Plan
1/8" = 1'-0"

1/31/2019

DESIGN DEVELOPMENT

FA1.1