

BUILDING SYSTEMS COMMISSIONING

1. GENERAL REQUIREMENTS:

1. BUILDING SYSTEMS TO BE COMMISSIONED IN ACCORDANCE WITH 2020 FLECC SECTION C408.

2. DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA ARE TO BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

II. COMMISSIONING SCOPE:

1. THE FOLLOWING MARKED SYSTEMS WILL BE COMMISSIONED IN THIS PROJECT:

SYSTEM	EQUIPMENT
ELECTRICAL	OCCUPANCY SENSOR CONTROLS
	TIME-SWITCH CONTROLS
	DAYLIGHT RESPONSIVE CONTROLS

III. COMMISSIONING PROCEDURE:

1. OCCUPANCY SENSORS:

1.1. CERTIFY THAT THE SENSOR HAS BEEN LOCATED AND AIMED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS

1.2. FOR EACH SENSOR TO BE TESTED, VERIFY THE FOLLOWING:

1.2.1. STATUS INDICATOR (AS APPLICABLE) OPERATES CORRECTLY.

1.2.2. THE CONTROLLED LIGHTS TURN OFF OR DOWN TO THE PERMITTED LEVEL WITHIN THE REQUIRED TIME.

FOR AUTO-ON OCCUPANCY SENSORS, THE LIGHTS DO TURN ON TO THE PERMITTED LEVEL WHEN SOMEONE ENTERS THE SPACE.

2. AUTOMATIC TIME SWITCHES:

2.1. CONFIRM THAT THE AUTOMATIC TIME SWITCH CONTROL IS PROGRAMMED WITH APPROPRIATE WEEKDAY, WEEKEND, AND HOLIDAY (AS APPLICABLE) SCHEDULES.

2.2. DOCUMENT FOR THE AGENCY AUTOMATIC TIME SWITCH PROGRAMMING INCLUDING WEEKDAY, WEEKEND, HOLIDAY SCHEDULES AS WELL AS ALL SET-UP AND PREFERENCE PROGRAM SETTINGS.

2.3. VERIFY THE CORRECT TIME AND DATE IS PROPERLY SET IN THE TIME SWITCH.

2.4. VERIFY THAT ANY BATTERY BACK-UP (AS APPLICABLE) IS INSTALLED AND ENERGIZED.

2.5. VERIFY THAT THE OVERRIDE TIME LIMIT IS SET TO NO MORE THAN 2 HOURS.

2.6. SIMULATE OCCUPIED CONDITION. VERIFY AND DOCUMENT THE FOLLOWING:

2.6.1. ALL LIGHTS CAN BE TURNED ON AND OFF BY THEIR RESPECTIVE AREA CONTROL SWITCH.

2.6.2. VERIFY THE SWITCH ONLY OPERATES LIGHTING IN THE ENCLOSED SPACE IN WHICH THE SWITCH IS LOCATED.

2.7. SIMULATE UNOCCUPIED CONDITION. VERIFY AND DOCUMENT THE FOLLOWING:

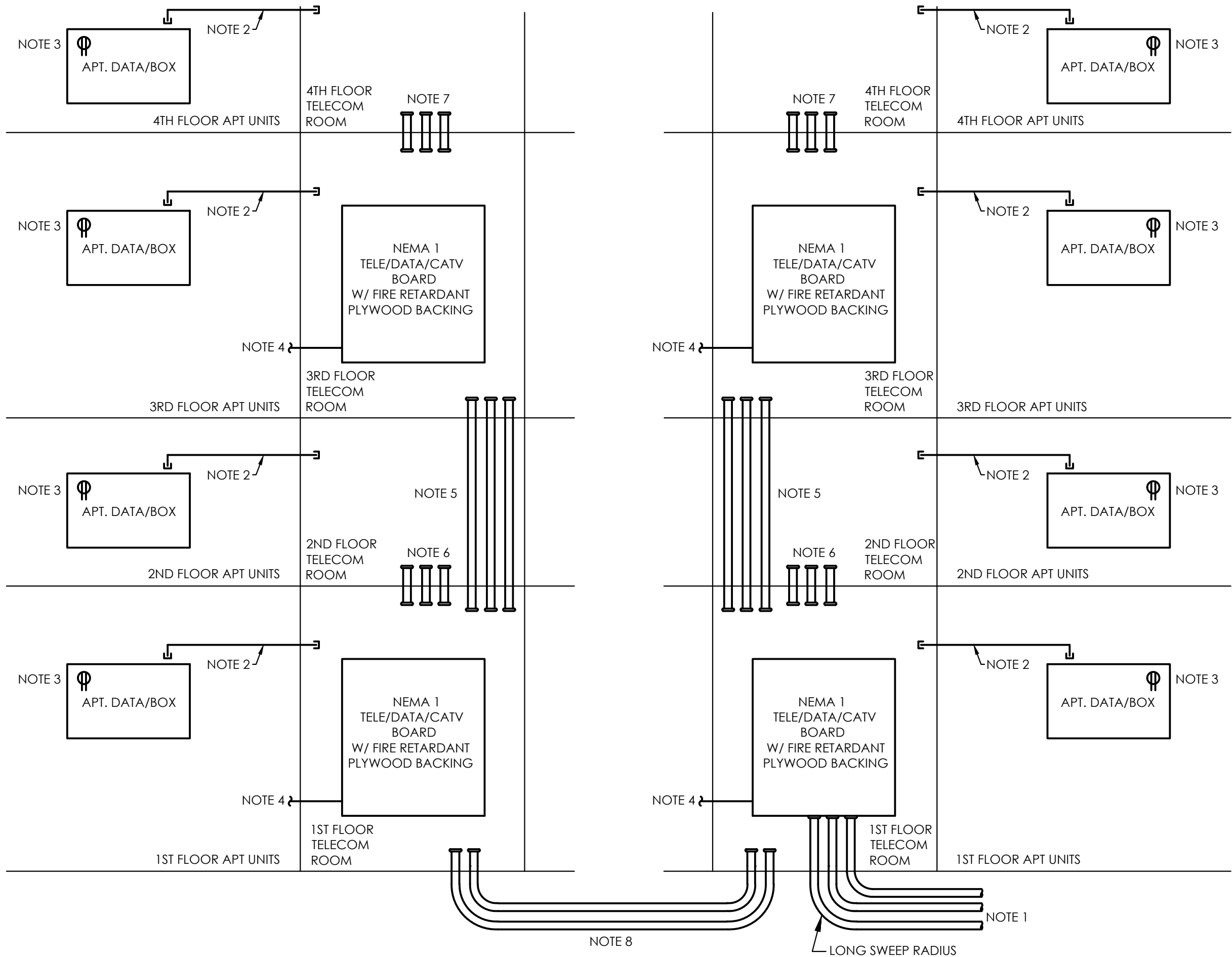
2.7.1. ALL NON-EMERGENCY LIGHTING TURNS OFF.

2.7.2. MANUAL OVERRIDE SWITCH ALLOWS ONLY THE LIGHTS IN THE ENCLOSED SPACE WHERE THE OVERRIDE SWITCH IS LOCATED TO TURN ON OR REMAIN ON UNTIL THE NEXT SCHEDULED SHUT OFF OCCURS.

3. DAYLIGHT CONTROLS:

3.1. ALL CONTROL DEVICES (PHOTOCONTROLS) HAVE BEEN PROPERLY LOCATED, FIELD-CALIBRATED AND SET FOR APPROPRIATE SET POINTS AND THRESHOLD LIGHT LEVELS.

3.2. DAYLIGHT CONTROLLED LIGHTING LOADS ADJUST TO APPROPRIATE LIGHT LEVELS IN RESPONSE TO AVAILABLE DAYLIGHT. THE LOCATION WHERE CALIBRATION ADJUSTMENTS ARE MADE IS READILY ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL.



- 3 TELE/DATA/CATV RISER
- NO SCALE
- TELE/DATA/CATV RISER NOTES:
1. PROVIDE (2) 4" AND (1) 2" CONDUITS PROVIDED UNDER SLAB/GROUND MDF ROOM IN FITNESS BUILDING W/ PULL STRING. CLEARLY LABEL AND COORDINATE EXACT TERMINATION LOCATION AND DETAILS WITH OWNER AND TELEPHONE UTILITY.

2. PROVIDE 1" CONDUIT W/ PULL STRING TO ALL APT UNITS. CLEARLY LABEL. SEE PLANS FOR LOCATIONS.

3. PROVIDE 120V RECEPTACLE FOR TELEPHONE AND OTHER COMMUNICATION EQUIPMENT (SEE POWER PLANS).

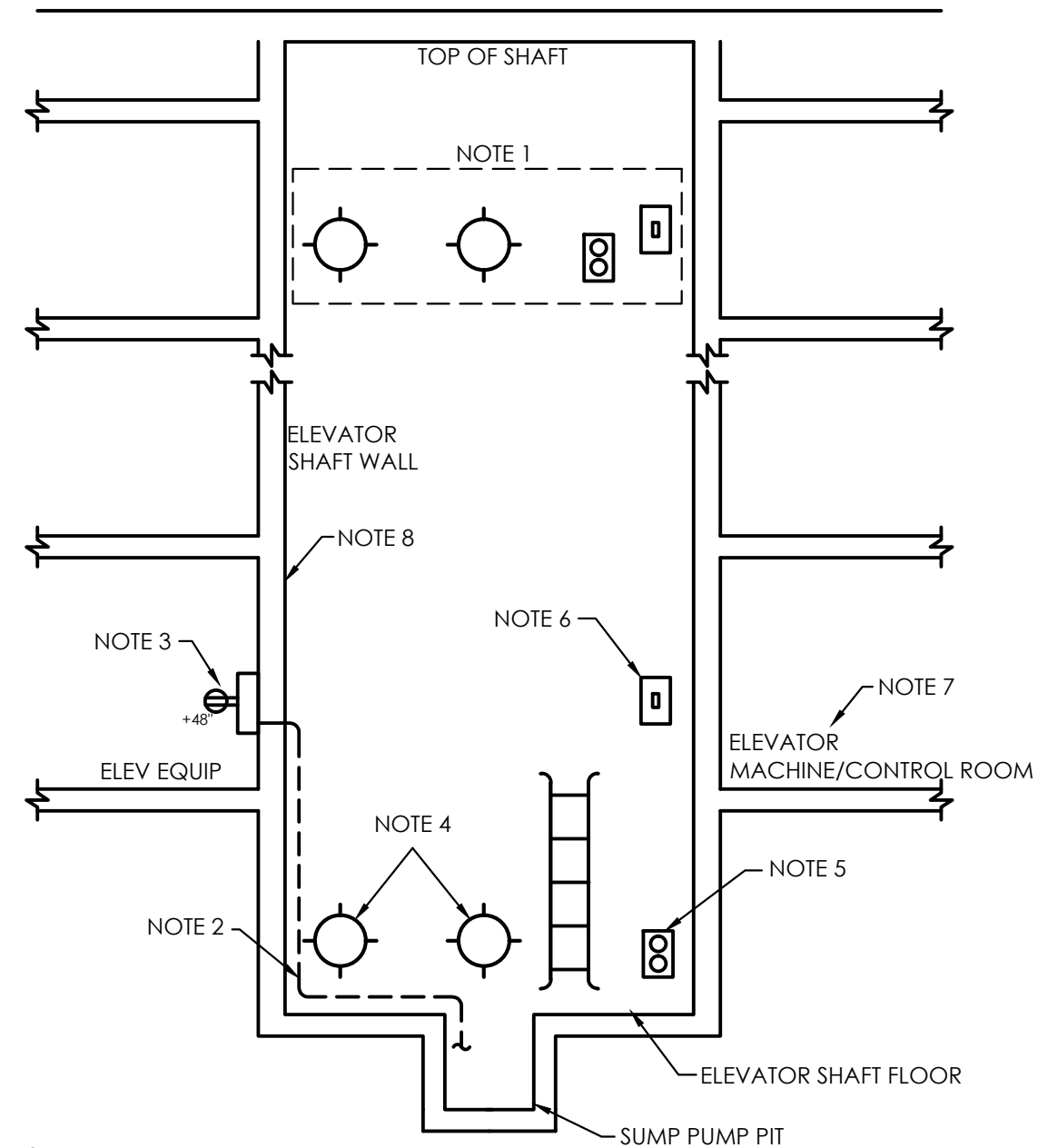
4. PROVIDE #6 CU GROUNDING/BONDING CONDUCTOR IN 3/2" CONDUIT TO INTERSYSTEM BONDING TERMINATION (IBT) AT BUILDING ELECTRICAL SERVICE. BOND CONDUIT/CONDUCTOR AT EACH END OF CONDUIT IF METAL RACEWAY IS USED. INSTALL PER NEC 250.94 & NEC 800.100. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.

5. PROVIDE THREE 4" CONDUITS W/ PULL STRING BETWEEN FIRST AND THIRD FLOOR TELECOM ROOMS.

6. PROVIDE THREE 4" CONDUITS BETWEEN FIRST AND SECOND FLOOR TELECOM ROOMS.

7. PROVIDE THREE 4" CONDUITS BETWEEN THIRD AND FOURTH FLOOR TELECOM ROOMS.

8. PROVIDE (2) 4" CONDUITS UNDER SLAB BETWEEN FIRST FLOOR TELECOM ROOMS.



- 2 ELEVATOR SHAFT DETAIL
- NO SCALE
- NOTES:
1. LIGHTS AND RECEPTACLE PER ELEVATOR MANUFACTURERS REQUIREMENTS.

2. CONTROL AND POWER FROM SUMP PUMP TO CONTROL PANEL PROVIDED AND INSTALLED BY P.C..

3. E.C. TO PROVIDE POWER FOR SUMP PUMP CONTROL PANEL (SEE PLANS). CONTROL PANEL FURNISHED BY P.C.. COORDINATE EXACT LOCATION WITH P.C..

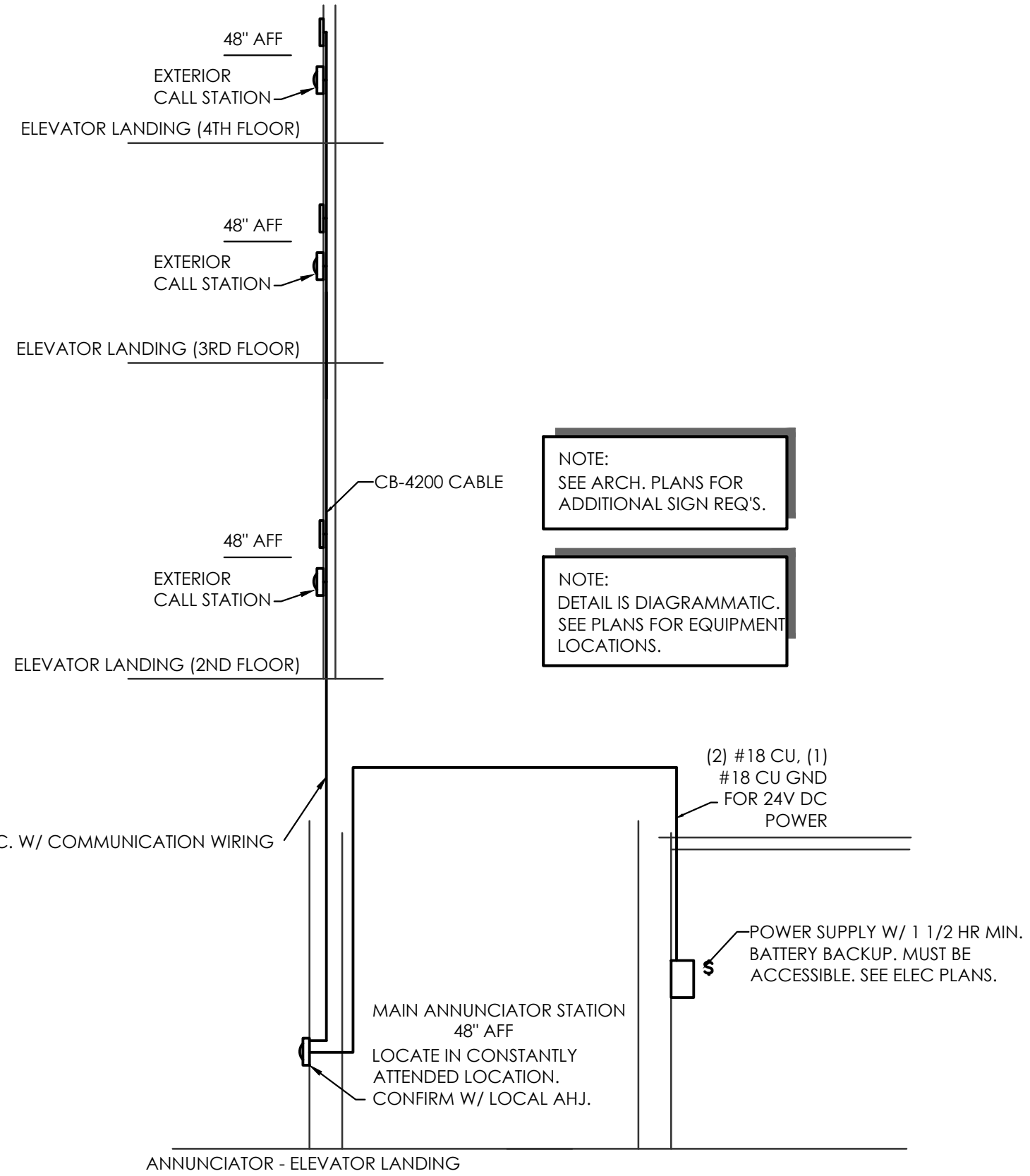
4. PROVIDE (2) LIGHTS 18" ABOVE PIT FLOOR/ SEE PLAN FOR LOCATION. PIT LIGHTS AND RECEPTACLE TO NOT SHARE THE SAME CIRCUIT.

5. PROVIDE (1) GFCI WEATHER-PROOF RECEPTACLE 18" ABOVE PIT FLOOR. SEE PLAN FOR LOCATION. (NEC 620.24, NEC 620.85). PIT LIGHTS AND RECEPTACLE TO NOT SHARE THE SAME CIRCUIT.

6. PROVIDE WEATHER-PROOF LIGHT SWITCH ADJACENT TO ELEVATOR PIT LADDER. COORDINATE LOCATION WITH ELEVATOR MANUFACTURER'S SUBMITAL (NEC 620.24).

7. BRANCH CIRCUITS, WIRING, AND DEVICES FOR MACHINE ROOMS OR CONTROL ROOMS TO FOLLOW NEC 620.23, NEC 620.37, AND NEC 620.85.

8. RATED SHAFT WALLS. SEE ARCHITECT PLANS.



- 1 TWO-WAY ELEVATOR COMMUNICATION
- NO SCALE
- NOTES:
1. EXTERIOR CALL STATION EQUAL TO ALPHA COMMUNICATIONS 4202 WEATHERPROOF MODEL.

2. ANNUNCIATOR PANEL EQUAL TO ALPHA COMMUNICATIONS 4200 SERIES WEATHERPROOF MODEL.

3. FURNISH W/ POWER SUPPLY, COMMUNICATION CABLES, REQUIRED SIGNAGE AND ALL OTHER COMPONENTS REQUIRED FOR A FULLY FUNCTIONING SYSTEM. COORDINATE PROGRAMMING WITH LOCAL AHJ AND OWNER.

LIGHTING SYSTEMS: CLUBHOUSE

FLECC SECTION C405 & C406

LIGHTING POWER DENSITY CALCULATION COMPLIANCE

INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

INTERIOR WATTAGE SPECIFIED VS. ALLOWED

1054 VS. 2100

EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.5.1. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED

253 VS. 801

NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED

NA VS. NA

DESIGNER STATEMENT:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE FLORIDA ENERGY CONSERVATION CODE, SECTION C405 & C406 AND ANY LOCAL AMENDMENTS THEREOF.

SIGNED: _____

NAME: ZACK L. TOMLIN, PE

TITLE: ELECTRICAL ENGINEER

ADDITIONAL PRESCRIPTIVE COMPLIANCE

NOT APPLICABLE (RENOVATION PROJECT) _____ C406.5 ON-SITE RENEWABLE ENERGY _____

C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT _____ C406.6 DEDICATED OUTDOOR AIR SYSTEM _____

C406.3 REDUCED LIGHTING POWER DENSITY X C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING _____

C406.4 ENHANCED DIGITAL LIGHTING CONTROLS _____

LIGHTING SYSTEMS: APARTMENT BUILDINGS

FLECC SECTION C405 & C406

LIGHTING POWER DENSITY CALCULATION COMPLIANCE

INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

INTERIOR WATTAGE SPECIFIED VS. ALLOWED

1155 VS. 8918

EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.5.1. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED

610 VS. 778

NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED

NA VS. NA

DESIGNER STATEMENT:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE FLORIDA ENERGY CONSERVATION CODE, SECTION C405 & C406 AND ANY LOCAL AMENDMENTS THEREOF.

SIGNED: _____

NAME: ZACK L. TOMLIN, PE

TITLE: ELECTRICAL ENGINEER

ADDITIONAL PRESCRIPTIVE COMPLIANCE

NOT APPLICABLE (RENOVATION PROJECT) _____ C406.5 ON-SITE RENEWABLE ENERGY _____

C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT _____ C406.6 DEDICATED OUTDOOR AIR SYSTEM _____

C406.3 REDUCED LIGHTING POWER DENSITY X C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING _____

C406.4 ENHANCED DIGITAL LIGHTING CONTROLS _____