Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 03/30/15

## DEVICE ADDRESSES:

DEVICE AND MODULE ADDRESSES ARE TO BE DETERMINED BY THE INSTALLER ACCORDING TO EXISTING ADDRESSES ON THE SLC LOOP.

## LEGEND

| | |
|---|---|
| PS | PULL STATION |
| S | SMOKE DETECTOR |
| FRM 1 | RELAY MODULE |
| FCM 1 | CONTROL MODULE |
| FMM 1 | MONITOR MODULE (FMM-101: MINI MODULE |
| HS XX | HORN/STROBE (XX NOTES CANDELA) |
| S XX | STROBE (XX NOTES CANDELA) |

## WIRE LEGEND

| | |
|---|---|
| A | 1 PR #12 AWG TWISTED PAIR CABLE(Up to 10,000 ft) |
| A | 1 PR #14 AWG TWISTED PAIR CABLE(Up to 8,000 ft) |
| A | 1 PR #16 AWG TWISTED PAIR CABLE(Up to 4,500 ft) |
| B | 1 PR #14 AWG FPL CABLE |
| C | 1 CAT5 CABLE |
| D | 1 PR #18 AWG TWISTED UNSHIELDED CABLE |
| F | 1c #12 AWG CABLE |
| L | 1 PR #18 AWG TWISTED SHIELDED CABLE |

## INSTALLATION NOTES:

FIELD WIRING SHALL BE INSTALLED FOLLOWING THE CURRENT EDITION OF **NFPA 70: NATIONAL ELECTRIC CODE(2014)**, ALL APPLICABLE **MUNICIPAL, COUNTY, & STATE CODES, REQUIREMENTS, AND REGULATIONS,** AS WELL AS ALL **MANUFACTURER GUIDELINES FOR INSTALLATION**.

CONTROL PANELS, DEVICES, AND ALL OTHER SYSTEM COMPONENTS SHALL BE INSTALLED FOLLOWING THE CURRENT EDITION OF **NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE(2013)**, ALL APPLICABLE **MUNICIPAL, COUNTY, & STATE CODES, REQUIREMENTS, AND REGULATIONS,** AS WELL AS ALL **MANUFACTURER GUIDELINES FOR INSTALLATION**.

THE INSTALLER SHALL FOLLOW CORRECT CONDUCTOR POLARITY, INDICATED CIRCUIT DIVISIONS, PROPER GROUNDING AND SHIELDING WITHOUT EXCEPTION. IMPROPER INSTALLATION CAN RESULT IN INTERFERENCE, TRANSIENT VOLTAGE, OR SHORT CIRCUITS CAUSING UNDESIRED OPERATION OR DAMAGE TO THE CONTROL PANEL, DEVICES AND ANY OTHER INTEGRATED COMPONENTS.

THE GAUGE OF WIRE USED FOR THE SLC LOOP (IDENTIFIED AS "A" ON THIS PRINT), SHALL BE DETERMINED BY THE INSTALLER FOLLOWING GUIDELINES AND LIMITATIONS SET FORTH BY THE MANUFACTURER(NOTIFIER DOCUMENT #51253, *INTELLIGENT CONTROL PANEL SLC WIRING MANUAL*). THE SLC WIRING RISER IS SHOWN DIAGRAMMATICALLY ONLY TO ALLOW FOR VARIANCES IN ACTUAL WIRE DISTANCE, DEVICE PLACEMENT AND STRUCTURAL OR ENVIRONMENTAL REQUIREMENTS.

ANY T-TAPPING OF SLC WIRING SHALL FOLLOW ALL REQUIREMENTS IN NOTIFIER DOCUMENT #51253, *INTELLIGENT CONTROL PANEL SLC WIRING MANUAL*.

WIRE FOR THE NOTIFICATION APPLIANCE CIRCUITS (IDENTIFIED AS "B" ON THIS PRINT), SHALL FOLLOW THE SPECIFIC REQUIREMENTS OF THE **WIRING LEGEND**. THIS WAS DETERMINED BY THE AVAILABLE DIMENSIONED OR SCALED FLOOR PLAN DEVICE LAYOUT. PLEASE REFERENCE THE *VOLTAGE DROP CALCULATIONS* LOCATED ON THIS PRINT FOR DISTANCE LIMITATIONS. THE INDICATED DISTANCES IN THE *VOLTAGE DROP CALCULATIONS* FOR EACH CIRCUIT SHALL BE CONSIDERED THE MAXIMUM LENGTH. ANY DISTANCES EXCEEDING THOSE IN THE *VOLTAGE DROP CALCULATIONS* MUST BE BROUGHT TO THE ATTENTION OF NORRIS INC. TO ASSURE PROPER FUNCTIONALITY AND COMPLIANCE OF THE NOTIFICATION APPLIANCES.

THIS SYSTEM MEETS NFPA REQUIREMENTS FOR OPERATION AT 32-120°F AND A RELATIVE HUMIDITY OF 91-95% AT 87-93°F. HOWEVER, THE USEFUL LIFE OF THE SYSTEM'S STANDBY BATTERIES AND THE ELECTRONIC COMPONENTS MAY BE ADVERSELY AFFECTED BY EXTREME TEMPERATURE RANGES AND HUMIDITY. THEREFORE, IT IS RECOMMENDED THAT THIS SYSTEM AND ITS PERIPHERALS BE INSTALLED IN AN ENVIRONMENT WITH A NORMAL ROOM TEMPERATURE OF 60-80°F.

END OF LINE DEVICES MUST BE INSTALLED IN AN EASILY ACCESSIBLE LOCATION AND CLEARLY MARKED OR LABELED.

## DESIGN NOTES:

SYSTEM DESIGN PERFORMANCE AND COMPLIANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS IS THE RESPONSIBILITY OF THE DESIGNING ENGINEER. PROPER INSTALLATION OF THIS SYSTEM AND ITS COMPONENTS IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. ANY ALTERATIONS, CHANGES, OR DEFICIENCES MUST BE BROUGHT TO THE ATTENTION OF THE DESIGNING ENGINEER.

NORRIS INC. ASSUMES NO RESPONSIBILITY FOR ERRORS IN SYSTEM DESIGN OR INSTALLATION, AS WELL AS ANY COSTS ASSOCIATED WITH CORRECTING THESE ERRORS, IF ANY EXIST, UNLESS SYSTEM DESIGN OR INSTALLATION WAS PERFORMED BY NORRIS INC.

NOTIFICATION APPLIANCE CIRCUIT VOLTAGE DROPS

Seaside Rehabilitation - Lobby Renovations
Portland, Maine

| PANEL | CIRCUIT | LENGTH | CURRENT DRAW | VOLTAGE DROP | VOLTAGE LOSS | END VOLTAGE |
|---|---|---|---|---|---|---|
| FCPS | NAC 1 | 204 FT | 1.254A | 1.29VDC | 5.38% | 22.71VDC |
| FCPS | NAC 2 | 280 FT | 1.016A | 1.44VDC | 6.00% | 22.56VDC |

Calculated Using #14 AWG Wire @ Maximum Distance/Current

| | | |
|---|---|---|
| REVISION 2 | DATE: | |
| REVISION 1 | DATE: | |
| REVISION 0 SUBMITTAL | DATE: | 11/25/2014 |

FACP WIRING RISER

PROJECT NAME **SEASIDE REHAB AND HEALTHCARE LOBBY RENOVATIONS**
850 BAXTER BOULEVARD
PORTLAND, ME

SCALE NTS
BY: JRS
CK BY:
SAVED AS:

NORRIS INC
Prepared For Tomorrow; Delivered Today
2257 BROADWAY, SOUTH PORTLAND, MAINE