NOTIFICATION APPLIANCE CIRCUIT VOLTAGE DROPS								
Park Danforth Portland, Maine								
PANEL	CIRCUIT	WIRE GAUGE	LENGTH	CURRENT DRAW	VOLTAGE DROP	VOLTAGE LOSS	END VOLTAGE	CIRCUIT LOAD
FCPS #1	NAC 1	14	290 FT	1.437A	2.10VDC	8.75%	21.9VDC	48%
FCPS #1	NAC 2	14	330 FT	.597A	1.0VDC	4.17%	23.0VDC	20%
FCPS #1: 2.034A/8A Spare Capacity: 74%								
FCPS #2	NAC 1	14	200 FT	1.339A	1.35VDC	5.63%	22.65VDC	45%
FCPS #2	NAC 2	14	190 FT	1.422A	1.36VDC	5.67%	22.64VDC	47%
FCPS #2	NAC 3	14	215 FT	1.701A	1.85VDC	7.71%	22.15VDC	57%
FCPS #2	NAC 4	14	415 FT	1.506A	3.16VDC	13.17%	20.84VDC	50%
FCPS #2: 5.968A/8A Spare Capacity: 25%								
FCPS #3	NAC 1	14	140 FT	.519A	.037VDC	1.54%	23.63VDC	17%
FCPS #3	NAC 2	14	260 FT	1.513A	1.99VDC	8.29%	22.01VDC	50%
FCPS #3	NAC 3	14	155 FT	.519A	.41VDC	1.71%	23.59VDC	17%
FCPS #3	NAC 4	14	195 FT	.810A	.80VDC	3.33%	23.2VDC	27%
FCPS #3: 3.361A/8A Spare Capacity: 58%								
FCPS #4	NAC 1	14	160 FT	.933A	.75VDC	3.13%	23.25VDC	31%
FCPS #4	NAC 2	14	220 FT	1.513A	1.68VDC	7.00%	22.32VDC	50%
FCPS #4	NAC 3	14	190 FT	.711A	.68VDC	2.83%	23.32VDC	28%
FCPS #4	NAC 4	14	170 FT	.758A	.65VDC	2.71%	23.35VDC	25%
FCPS #4: 3.915A/8A Spare Capacity: 51%								
Calculated @ Maximum Distance/Current								

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 02/09/16

LEGEND

HS XX — HORN/STROBE (XX NOTES CANDELA)

S XX — STROBE (XX NOTES CANDELA)

WIRE LEGEND

B 2 COND 14 AWG FPL CABLE
E 2 COND 16 AWG TWISTED SHIELDED FPL 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.

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 SHEET 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 APPLIANCE CIRCUITS.

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.

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 DEFICIENCIES 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.

REVISION 0 SUBMITTAL DATE: 12/20/2015

FCPS NAC WIRING RISER

PROJECT NAME
PARK DANFORTH
777 STEVENS AVENUE
PORTLAND, MAINE 04103

BY: JRS
CK:
SCALE: NONE
SHEET: FA-3

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