Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/29/13

VOLTAGE DROP CALCULATIONS

USM - Payson Smith Hall
Portland, ME

Circuit 1

Amperage	1.04
Length of Run	280
Voltage Drop	**6.38%**
VDC Applied	**18.87**

Circuit 2

Amperage	0.92
Length of Run	214
Voltage Drop	**4.31%**
VDC Applied	**19.37**

Circuit 3

Amperage	1.01
Length of Run	195
Voltage Drop	**4.31%**
VDC Applied	**19.37**

Circuit 4

Amperage	0.998
Length of Run	178
Voltage Drop	**3.89%**
VDC Applied	**19.47**

Circuit 5

Amperage	1.088
Length of Run	156
Voltage Drop	**3.72%**
VDC Applied	**19.51**

Circuit 6

Amperage	1.08
Length of Run	168
Voltage Drop	**3.98%**
VDC Applied	**19.45**

Circuit 7

Amperage	0.936
Length of Run	210
Voltage Drop	**4.30%**
VDC Applied	**19.37**

Circuit 8

Amperage	0.96
Length of Run	225
Voltage Drop	**4.73%**
VDC Applied	**19.27**

Voltage Drop Parameters:
16 VDC = Minimum Power to any Appliance
4.4 VDC = Maximum Permissible Voltage Drop in Wiring System
20.4 VDC = Reduced Battery Potential at End of Life