





LOFTS FIRE ALARM PLAN

 SCALE: 1/8"=1'-0"

 FIELD VERIFY DIMENSIONS

RESERVED FOR CITY STAMP

NAC Circuit Voltage Drop Calculation

 Project Name: CREIGHTON & SONS

 Circuit Number: NAC-1

Nominal System Voltage: 20.4 volts

 Minimum Device Voltage: 16 volts

 Distance from source to 1st device: 30

 Wire Gauge for balance of circuit: 16

 Max Output Current: 1.53 amps

 Total Circuit Current: 1.042 amps

Circuit is within limits

Device	Current	Distance previous device	Voltage at device	Drop from source	Percent Drop
Device 1	0.107		20.09	0.31	1%
Device 2	0.202	5	20.05	0.35	2%
Device 3	0.218	50	19.69	0.71	3%
Device 4	0.218	65	19.36	1.04	5%
Device 5	0.297	30	19.28	1.12	6%
Totals		180		1.12	6%

NAC Circuit Voltage Drop Calculation

 Project Name: CREIGHTON & SONS

 Circuit Number: NAC-2

Nominal System Voltage: 20.4 volts

 Minimum Device Voltage: 16 volts

 Distance from source to 1st device: 25

 Wire Gauge for balance of circuit: 16

 Max Output Current: 1.33 amps

 Total Circuit Current: 1.179 amps

Circuit is within limits

Device	Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.218		20.11	0.29	1%
Device 2	0.178	25	19.88	0.32	1%
Device 3	0.081	39	19.65	0.75	4%
Device 4	0.079	44	19.42	0.98	5%
Device 5	0.079	32	19.42	1.08	5%
Device 6	0.068	20	19.31	1.29	6%
Device 7	0.218	40	19.11	1.29	6%
Device 8	0.290	90	18.85	1.55	8%
Totals		265		1.55	8%

NAC Circuit Voltage Drop Calculation

 Project Name: CREIGHTON & SONS

 Circuit Number: NAC-3

Nominal System Voltage: 20.4 volts

 Minimum Device Voltage: 16 volts

 Distance from source to 1st device: 50

 Wire Gauge for balance of circuit: 16

 Max Output Current: 1.53 amps

 Total Circuit Current: 0.606 amps

Circuit is within limits

Device	Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.218		20.10	0.30	1%
Device 2	0.176	60	19.88	0.52	3%
Device 3	0.212	95	19.68	0.72	4%
Totals		205		0.72	4%

NAC Circuit Voltage Drop Calculation

 Project Name: CREIGHTON & SONS

 Circuit Number: NAC-4

Nominal System Voltage: 20.4 volts

 Minimum Device Voltage: 16 volts

 Distance from source to 1st device: 35

 Wire Gauge for balance of circuit: 16

 Max Output Current: 1.53 amps

 Total Circuit Current: 1.137 amps

Circuit is within limits

Device	Current	Distance previous device	Voltage at Device	Drop from source	Percent Drop
Device 1	0.212		20.01	0.39	2%
Device 2	0.107	5	19.97	0.43	2%
Device 3	0.212	55	19.53	0.87	4%
Device 4	0.218	80	19.05	1.35	7%
Device 5	0.212	65	18.80	1.60	8%
Device 6	0.176	95	18.64	1.76	9%
Totals		335		1.76	9%



CREIGHTON & SONS FLORIST

 123 WASHINGTON AVENUE

 PORTLAND, MAINE 04101

 LOFTS FIRE ALARM PLAN



SEACOAST SECURITY

4 Summer Street • Freeport, Maine 04032

 Office: (207) 706-3369 • Fax: (207) 865-0852

REVISION	DESCRIPTION	DATE
0	ISSUED FOR REVIEW & APPROVAL	7/20/2015

DRAWN: JPB

 UNICAD JOB #15474

 CHECKED: WAYNE B. HAYS

 NICTE IV 90486

 DATE: 7/20/2015

 REVISION: 0

 SCALE: 1/8"=1'-0"

FA-3