GENERAL NOTES

- 1. INSTALLATION SHALL BE ACCOMPLISHED IN STRICT COMPLIANCE WITH NFPA, LOCAL, AND STATE AHJ'S, NEC, AND CONTRACT DRAWINGS.
- 2. RECORD DRAWINGS ARE REQUIRED AT THE TIME OF AHJ ACCEPTANCE. PATRIOT FIRE PROTECTION, INC. REQUIRES ELECTRICAL RED LINES WITH IN TWO WEEKS PRIOR TO PRIOR AHJ TESTS.
- 3. AGREEMENT AND CONFIRMATION OF ALL MILESTONE EVENTS WILL BE MADE WITH PATRIOT FIRE PROTECTION, INC. PROJECT MANAGER, ALL FS TECHNOLOGIES FIELD SERVICES MUST BE SCHEDULED WITH PATRIOT FIRE PROTECTION, INC. PROJECT MANAGER WITH A MINIMUM OF TEN BUSINESS DAYS ADVANCE NOTICE.
- 4. A SET OF INSTALLATION AS-BUILT DRAWINGS SHOWING ACTUAL CONDUIT AND CONDUCTOR ROUTES SHALL BE KEPT BY PROJECT FOREMAN FOR USE
- BY PATRIOT FIRE PROTECTION, INC. ALARM TECHNICIAN. 5. FIRE ALARM CONTROL PANEL SHALL NOT BE ENEGRIZED WITHOUT THE PRESENCE OF A PATRIOT FIRE PROTECTION, INC. ALARM TECHNICIAN.
- 6. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY UNDERWRITERS LISTED MONITORING STATION BEFORE AHJS TEST.
- 7. THE WIRING ROUTING IS DIAGRAMMATIC IN NATURE ONLY AND NOT INTENDED FOR ACTUAL CONDUIT ROUTING.
- 8. ALL CONDUIT SIZING AND ROUTING BY ELECTRICAL CONTRACTOR PER NEC AND AHJ.
- 9. NO LINE VOLTAGE IN SAME CONDUIT AS POWER LIMITED FIRE ALARM CABLE.
- 10. VERIFY ALL LOCATIONS OF DEVICES WITH ELECTRICAL AND ARCHITECTURAL PLANS, SCALE AND PLACE DEVICES PER ELECTRICAL
- 11. FIELD VERIFY WATERFLOW SWITCHES, TAMPER SWITCHES, PRESSURE SWITCHES, SMOKE DAMPERS, AND DUCT DETECTOR LOCATIONS.
- 12. FIELD VERIFY ALL WIRING LOCATIONS AND REQUIREMENTS FOR HVAC AND FAN CONTROL
- 13. SMOKE DETECTORS SHALL NOT BE LOCATED WITH IN 36" OF ANY DIFFUSER
- 14. WALL MOUNTED AUDIBLE/VISUAL APPLIANCES SHALL BE MOUNTED IN SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN
- 15. THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL NOT BE LESS THAN 3'-6" AND NOT MORE THAN 4'-0" ABOVE THE FINISHED FLOOR.
- 16. NO DETECTORS SHALL BE INSTALLED UNTIL AFTER FINAL CONSTRUCTION CLEAN-UP, DETECTORS THAT HAVE BEEN INSTALLED PRIOR TO CLEAN-UP MUST BE CLEANED OR REPLACED AND WILL BE INVOICED ON A TIME AND MATERIAL BASIS.
- A DEDICATED BRANCH CIRCUIT OF ONE OF THE FOLLOWING SHALL SUPPLY PRIMARY POWER.
- COMMERCIAL LIGHT AND POWER.
- AN ENGINE-DRIVEN GENERATOR OR EQUIVALENT WHERE A PERSON SPECIFICALLY TRAINED IN ITS OPERATIONS IS ON DUTY AT ALL TIMES
- AN ENGINE-DRIVEN GENERATOR OR EQUIVALENT ARRANGED FOR COGENERATION WITH COMMERCIAL LIGHT AND POWER WHERE A PERSON SPECIFICALLY TRAINED IN ITS OPERATION IS ON DUTY AT ALL TIMES.
- 18. ALL CIRCUITS WILL BE PROPERLY TAGGED AND TESTED FOR OPENS, SHORTS, GROUNDS, AND PROPER "END-TO-LINE" RESISTANCE. EACH CIRCUITS METER READING MUST BE DOCUMENTED AND PRESENTED TO PATRIOT FIRE PROTECTION, INC. ALARM TECHNICIAN UPON ARRIVAL ONSITE FOR STARTUP AND CHECKOUT.
- 19. NO TAPPING OF SIGNALING OR INITIATING ZONE CIRCUITS ARE ALLOWED. T-TAPPING OF STYLE 4 ADDRESSABLE CIRCUITS IS ALLOWED PROVIDING A SPLICE IS PROFESSIONALLY INSTALLED, POLARITY IS OBSERVED, AND SHIELDS ARE CONTINUOUS AND FREE OF GROUNDS. SHIELDS MUST BE TERMINATED AT THE FIRE ALARM CONTROL PANEL ONLY. CABLE SHIELDS SHALL BE SPLICED TOGETHER AT EVERY JUNCTION BETWEEN THE FIRE ALARM CONTROL PANEL AND THE LAST DEVICE ON EACH CABLE RUN. SHIELDS AND OTHER FIRE ALARM CONDUCTORS (EXCEPT POWER GROUNDS) SHALL BE INSULATED AND COMPLETELY FREE FROM CONDUIT OR EARTH GROUNDS. SHIELDS WILL BE TIED TO GROUND ONLY AT THE FIRE ALARM CONTROL PANEL.

DRAWING ACCEPTANCE

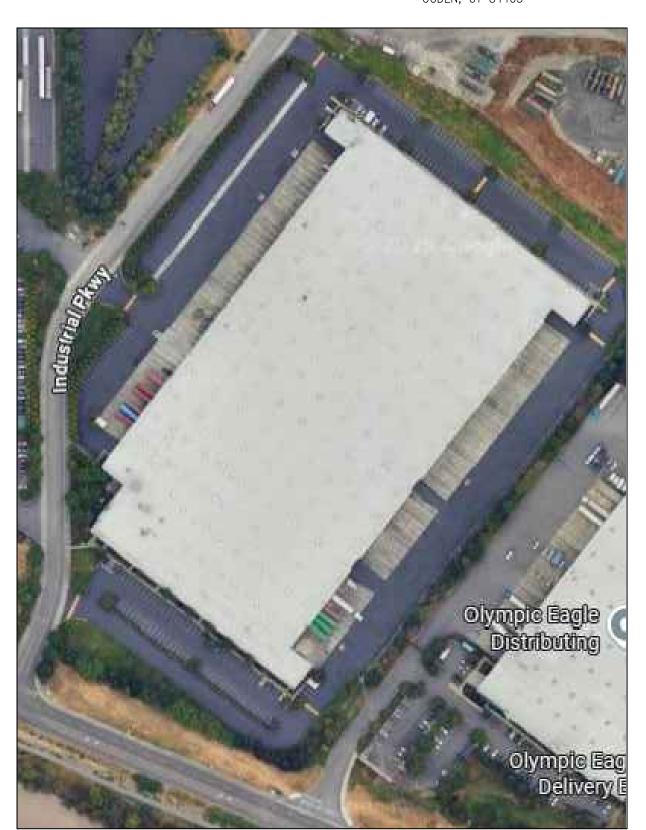
THIS DRAWING IS TO BE USED FOR THE PURPOSE OF PLACING AND LOCATING PATRIOT FIRE PROTECTION, INC. FIRE ALARM DEVICES AND IS NOT TO BE USED FOR ANY OTHER PURPOSES.

INSTALLATION COMPANY

PATRIOT FIRE PROTECTION, INC. 2707 70TH AVE E, TACOMA, WA 98424

MONITORING COMPANY

AVANTGUARD MONITORING CENTERS, LLC 4699 HARRISON BLVD, SUITE 100 OGDEN, UT 84403





SCOPE OF WORK

ADD/RELOCATE SMOKE DETECTORS AND NOTIFICATION DEVICES FOR NEW FINISHING ROOM

ADD/RELOCATE NOTIFICATION DEVICES FOR NEW RACKING ADD (1) 10-AMP POWER SUPPLY IN FACP ROOM

SYSTEM DESIGN CODES

INTERNATIONAL BUILDING CODE (IBC 2021 EDITION) INTERNATIONAL FIRE CODE (IFC 2020 EDITION) NATIONAL ELECTRICAL CODE (NFPA 70 2020 EDITION) ADA INTERNATIONAL CODE ANSIE 117.1

NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72 2019 EDITION)

USE & OCCUPANCY CLASSIFICATION

☐ ASSEMBLY (A) \square A-1 \square A-2 \square A-3 \square A-4 \square A-5

■ BUSINESS (B)

☐ EDUCATIONAL (E)

 \square FACTORY & INDUSTRIAL (F) \square F-1 \square F-2

☐ HIGH HAZARD (H) \square H-1 \square H-2 \square H-3 \square H-4 \square H-5 ☐ INSTITUTIONAL (I) \square I-1 \square I-2 \square I-3 \square I-4

☐ MERCANTILE (M)

☐ RESIDENTIAL (R) \square R-1 \square R-2 \square R-3 \square R-4 ■ STORAGE (S) ■ S-1 □ S-2 □ S-3 □ S-4

☐ UTILITY & MISCELLANEOUS (U)

AUTOMATIC SPRINKLER PROTECTION

□ PARTIAL
■ FULL

DEVICE LEGEND

SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
FACU	1	SILENT KNIGHT	6820	INTELLIGENT FIRE ALARM CONTROL PANE WITH COMMUNICATOR
NAC	1	POTTER	PSN-106	10A CONVENTIONAL POWER SUPPLY WITH 6 OUTPUTS
(O)	6	SILENT KNIGHT	SK-PHOTO-W W/B300-6	WHITE, LOW-PROFILE PHOTOELECTRIC SENSOR W/BASE
×	22	SYSTEM SENSOR	SCRLED	STROBE, CEILING, RED
₽c	22	SYSTEM SENSOR	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED

REVIEWED FOR COMPLIANCE DDrake 09/15/2025 9:14:13 AM

THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.

STATE CERTIFICATION

Jeff Harasimowitz

Fire Alarm Systems - Level III

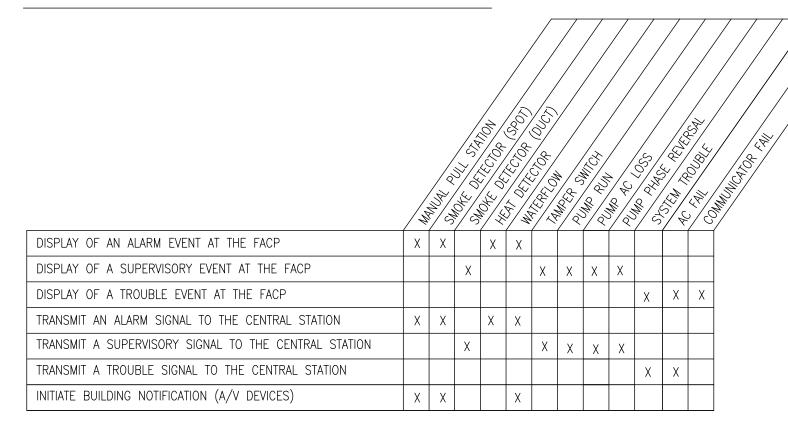
NICET Certification Number 160601

Exp: 11/01/2028

Authorizing Signature: ___

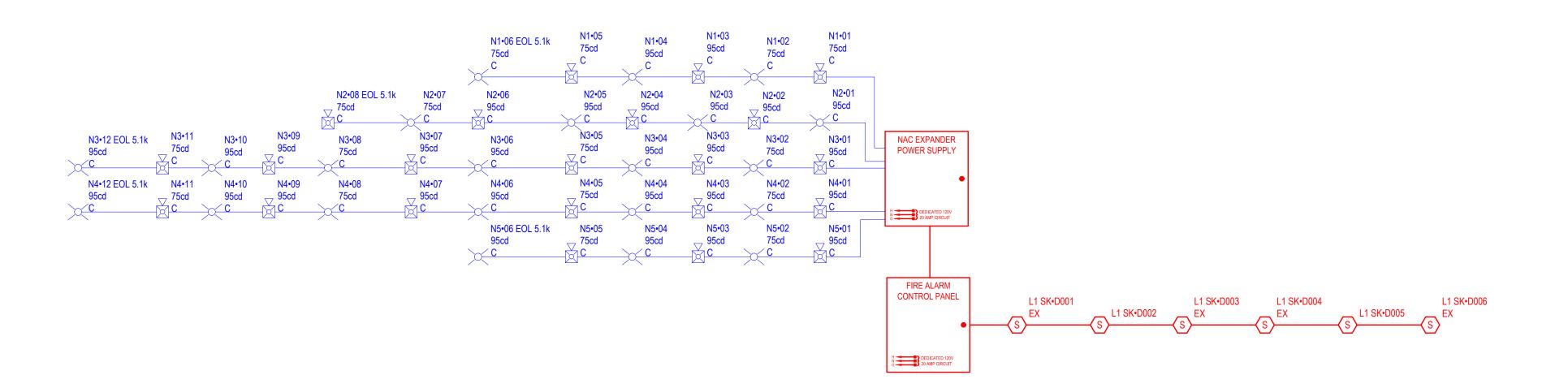
Development & P	Puyallup ermitting Service PERMIT
Building	Planning
Engineering	Public Works
Fire OF W	Traffic

OPERATION MATRIX



WIRE LEGEND

LABEL	PART NO	MANUFACTURER	APPLICATION	RESISTANCE MFT	AWG	DESCRIPTION	TOTAL LENGTH
Α	16/2 FPLR	GENERIC	SLC	4.89	16	2 COND. SOLID COPPER FPLR ADDRESSABLE	1143'
D	12/2 FPLR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLR ANALOG UNSHIELDED	2790'



RISER DIAGRAM

NOT TO SCALE

2707 70th AVE E.

PUYALLUP 1
1601 INDUSTRIAL PARK WAY SUITE 101&102

TEL: (253) 532-0967 FAX: (253) 922-6150 TACOMA, WA 98424 ERICK E. 8/19/25 19-1002

PATRIFP8370Q WWW.PATRIOTFIRE.COM Erick.Escobedo@patriotfire.com

REVISIONS

DESCRIPTION

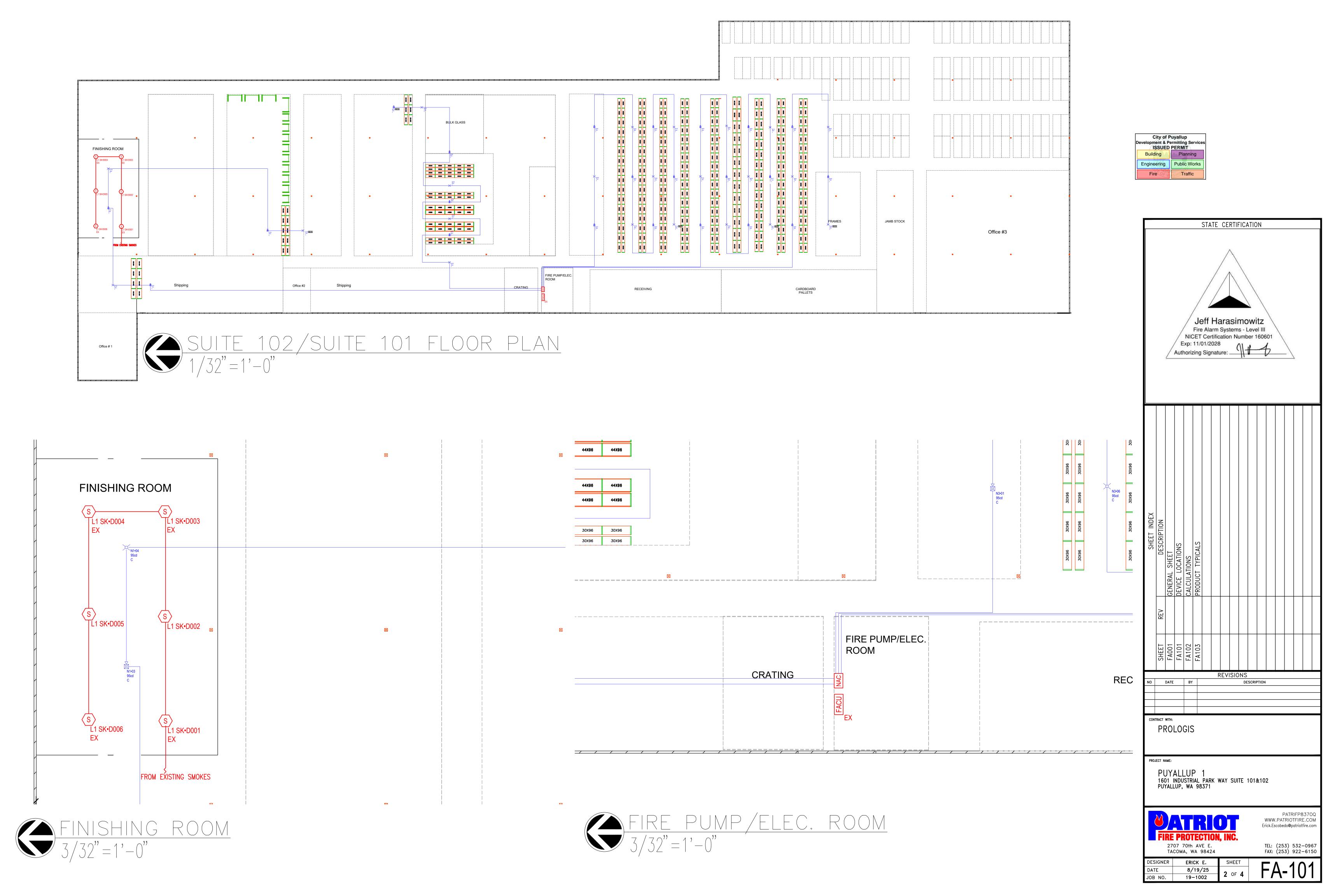
DATE BY

PROLOGIS

PUYALLUP, WA 98371

CONTRACT WITH:

PROJECT NAME:



					PANEL EX (6820) BATTERY CALCULATION						
					(SECONDARY F	OWER SOURCE REQUIREMENTS	S)					
								STANDBY CU	JRRENT	SECONDARY ALA	RM CURRENT	
					QTY	PART NO.	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	
	PANEL COMPONENTS					6820	INTELLIGENT FIRE ALARM CONTROL PANEL WITH COMMUNICATOR	0	0	0	0	
					1	6820 MAIN BOARD	MAIN BOARD	0.19	0.19	0.25	0.25	
CIRCUIT	MAX CARD AMPS	USED CARD AMPS	SPARE CARD AMPS	SYMBOL	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	
L1 SK	6	0.027000	0.007000	5.973000	⟨S⟩	2	SK-PHOTO-W W/B300-6	WHITE, LOW-PROFILE PHOTOELECTRIC SENSOR W/BASE	0.0002	0.0004	0.0045	0.009
LISK	0		5.973000	⟨S⟩	4	SK-PHOTO-W W/B300-6 (EX)	WHITE, LOW-PROFILE PHOTOELECTRIC SENSOR W/BASE	0.0002	0.0008	0.0045	0.018	
		1			-			TOTAL STANDBY (A)	0.1912	TOTAL ALARM (A)	0.277	
								REQUIRED STANDBY	Y TIME (HOURS)	24		
								REQUIRED ALARM T	TIME (MINUTES)	5		
		SE	CONDARY STANDBY LOAD (A)			0.1912	24		4.59		
SECONDARY ALARM LOAD (A)							0.277	0.277 0.083 0.023			3	
		STANDBY	AND ALARM SUBTOTAL (AMP	HOURS)						4.61		
			DERATING FACTOR							1.25		
		SECONDAF	RY LOAD REQUIREMENTS (AMI	P HOURS)						5.76		
					PROVID	DE (2) 12V 7AH BATTERIES						

			CURRENT S	SUMMARY	POWER SUM	MMARY
			MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.481	MAX. VOLTAGE DROP:	1.42
			SPARE CIRCUIT CURRENT (A):	2.52	VOLTAGE DROP %:	6.98 %
	N1 LUMP SU	IM REPORT	SPARE CIRCUIT CURRENT %:	83.97 %	MIN. OPERATIONAL VOLTAGE:	16
			MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	18.98
			TOTAL CARD CURRENT (A):	3.59	WIRE RESISTANCE (Ω/KFT):	1.93
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	767
			SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	2.96
			PROPERTIES: 'D' 12/2 FPLR 12 AWG, 2			
			JRED USING DRAWN SEGMENT LENG			
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
⊠ _c	2	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	75CD	0.087	0.174
⊠c	1	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	95CD	0.092	0.092
\rtimes_{c}	2	SCRLED	STROBE, CEILING, RED	75CD	0.07	0.14
\rtimes_{c}	1	SCRLED	STROBE, CEILING, RED	95CD	0.075	0.075
CULATION MI	ETHODS:				1	
AL RESISTAN	CF (O) = WIRE RES	SISTANCE (Ω/FT) X 2 X TOTAL CIRC	UIT LENGTH (FT)			

			CURRENT	SUMMARY	POWER SU	MMARY
			MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.6580	MAX. VOLTAGE DROP:	0.80
			SPARE CIRCUIT CURRENT (A):	2.34	VOLTAGE DROP %:	3.90 %
N2 LUMP SUM REPORT			SPARE CIRCUIT CURRENT %:	78.07 %	MIN. OPERATIONAL VOLTAGE:	16
			MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	19.60
			TOTAL CARD CURRENT (A):	3.59	WIRE RESISTANCE (Ω/KFT):	1.93
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	314
			SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	1.21
		CIRCUIT WIRING	PROPERTIES: 'D' 12/2 FPLR 12 AWG,	2 COND. SOLID COPPER FPLR ANA	ALOG UNSHIELDED	
		DISTANCE MEASU	RED USING DRAWN SEGMENT LENG	THS WITH 10.00 % ADDITIONAL LE		
MBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
⊠ _c	1	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	75CD	0.087	0.087
Z c	3	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	95CD	0.092	0.276
∝ _c	1	SCRLED	STROBE, CEILING, RED	75CD	0.07	0.07
\propto	3	SCRLED	STROBE, CEILING, RED	95CD	0.075	0.225

TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω /FT) X 2 X TOTAL CIRCUIT LENGTH (FT) TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)

			CURRENT	SUMMARY	POWER S	UMMARY
			MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.9820	MAX. VOLTAGE DROP:	2.09
			SPARE CIRCUIT CURRENT (A):	2.02	VOLTAGE DROP %:	10.26 %
	N3 LUMP SU	JM REPORT	SPARE CIRCUIT CURRENT %:	67.27 %	MIN. OPERATIONAL VOLTAGE:	16
			MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	18.31
			TOTAL CARD CURRENT (A):	3.59	WIRE RESISTANCE (Ω/KFT):	1.93
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	552
			SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	2.13
		CIRCUIT WIRING	PROPERTIES: 'D' 12/2 FPLR 12 AWG,	2 COND. SOLID COPPER FPLR ANAI	LOG UNSHIELDED	
		DISTANCE MEASU	RED USING DRAWN SEGMENT LENG	THS WITH 10.00 % ADDITIONAL LEN	GTH CALCULATED	
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
⊠ _c	2	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	75CD	0.087	0.174
⊠ _c	4	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	95CD	0.092	0.368
×c	2	SCRLED	STROBE, CEILING, RED	75CD	0.07	0.14
		SCRLED	STROBE, CEILING, RED	95CD	0.075	0.3

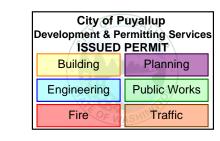
TOTAL RESISTANCE (Ω) = WIRE RESISTANCE (Ω /FT) X 2 X TOTAL CIRCUIT LENGTH (FT)

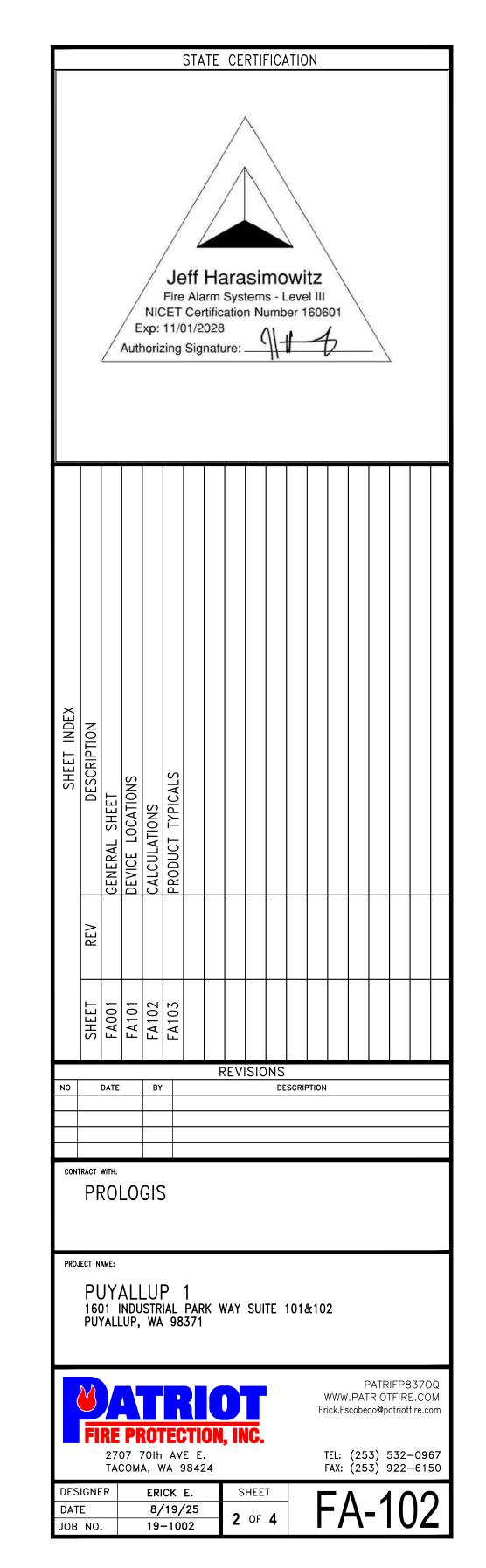
TOTAL VOLTAGE DROP = TOTAL RESISTANCE (Ω) X TOTAL CIRCUIT CURRENT (A)

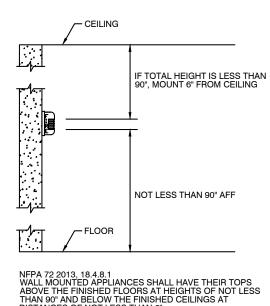
			CURRENT S	UMMARY	POWER SUN	IMARY
			MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.9820	MAX. VOLTAGE DROP:	2.45
			SPARE CIRCUIT CURRENT (A):	2.02	VOLTAGE DROP %:	11.99 %
	N4 LUMP SUN	I REPORT	SPARE CIRCUIT CURRENT %:	67.27 %	MIN. OPERATIONAL VOLTAGE:	16
			MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	17.95
			TOTAL CARD CURRENT (A):	3.59	WIRE RESISTANCE (Ω/KFT):	1.93
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	645
			SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	2.49
		CIRCUIT WIRING	PROPERTIES: 'D' 12/2 FPLR 12 AWG, 2	COND. SOLID COPPER FPLR A	NALOG UNSHIELDED	
			JRED USING DRAWN SEGMENT LENGT			
YMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
⊠ _c	2	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	75CD	0.087	0.174
⊠c	4	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	95CD	0.092	0.368
\rtimes_{c}	2	SCRLED	STROBE, CEILING, RED	75CD	0.07	0.14
×c	4	SCRLED	STROBE, CEILING, RED	95CD	0.075	0.3
CULATION ME	THODS:		1			
I DECICTANA	CE (O) - WIDE DESI	STANCE (Ω/FT) X 2 X TOTAL CIRC	LIIT I ENCTH (ET)			

			CURRENT	SUMMARY	POWER S	UMMARY
			MAX. CIRCUIT CURRENT (A):	3	STARTING CALC. VOLTAGE:	20.40
			TOTAL CIRCUIT CURRENT (A):	0.491	MAX. VOLTAGE DROP:	0.970
	SPARE CIRCUIT CURF			2.51	VOLTAGE DROP %:	4.76 %
	N5 LUMP SI	JM REPORT	SPARE CIRCUIT CURRENT %:	83.63 %	MIN. OPERATIONAL VOLTAGE:	16
			MAX. CARD CURRENT (A):	n/a	END OF LINE VOLTAGE:	19.43
			TOTAL CARD CURRENT (A):	3.59	WIRE RESISTANCE (Ω/KFT):	1.93
			SPARE CARD CURRENT (A):		TOTAL CIRCUIT LENGTH (FT):	512
			SPARE CARD CURRENT %:		TOTAL CIRCUIT RESISTANCE (Ω):	1.98
			PROPERTIES: 'D' 12/2 FPLR 12 AWG,			
			RED USING DRAWN SEGMENT LENG			
SYMBOL	QUANTITY	PART NO	DESCRIPTION	CANDELAS	ALARM CURRENT (A)	TOTAL CURRENT (A)
⊠c	1	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	75CD	0.087	0.087
⊠c	2	PC2RLED	2-WIRE, HORN STROBE, CEILING, RED	95CD	0.092	0.184
×c	1	SCRLED	STROBE, CEILING, RED	75CD	0.07	0.07
\times	2	SCRLED	STROBE, CEILING, RED	95CD	0.075	0.15

CAI CUI ATION METHODS:





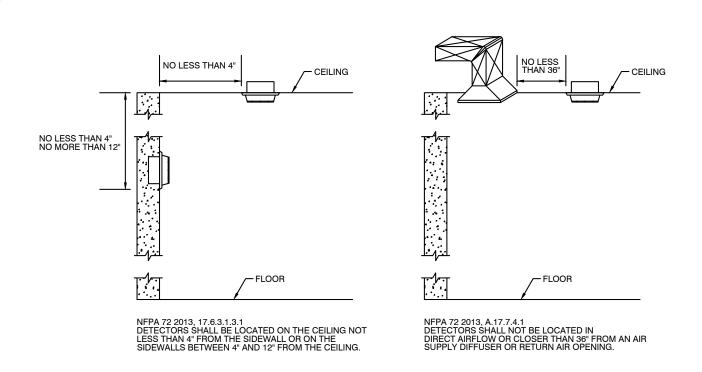


NOT LESS THAN 80" AFF

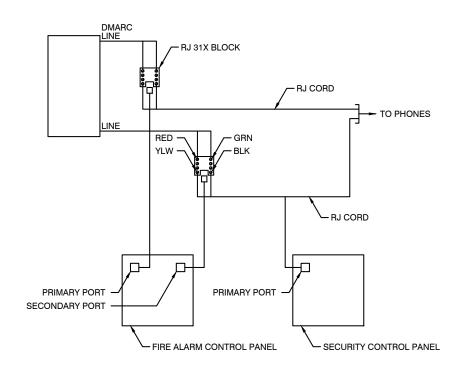
NOT MORE THAN 48" AFF NOT LESS THAN 42" AFF NFPA 72 2013, 17.14.5 THE OPERABLE PART OF A MANUALLY ACTUATED ALARM INITIATING DEVICE SHALL BE NOT LESS THE 42" AND NOT MORE THAN 48" FROM THE FINISHED FLOOR.

City of Puyallup elopment & Permitting Service ISSUED PERMIT Engineering Public Works Fire

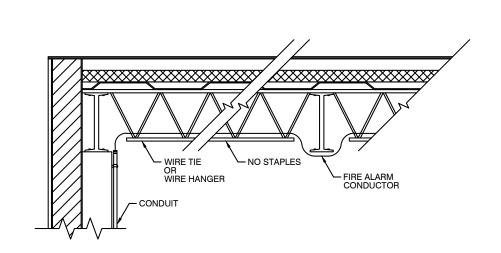
FIRE ALARM - HORN MOUNTING



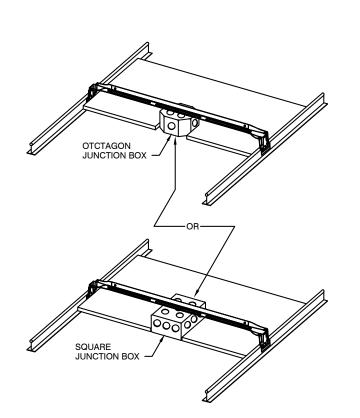
FIRE ALARM - STROBE MOUNTING B



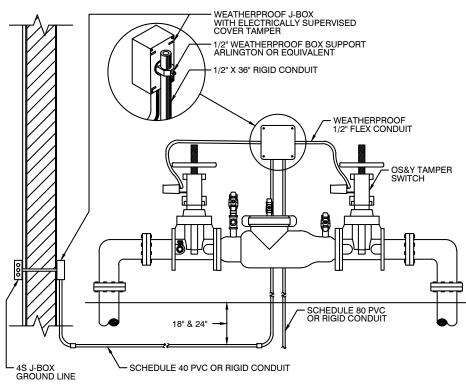
FIRE ALARM - PULL STATION MOUNTING



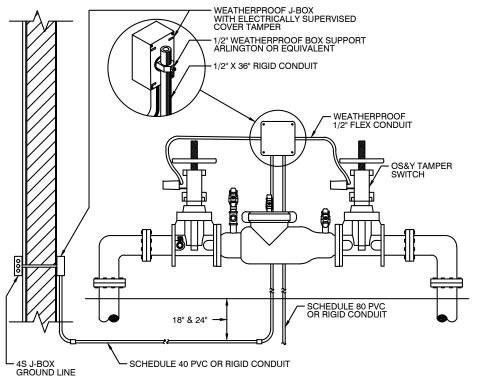
FIRE ALARM - SMOKE & HEAT MOUNTING

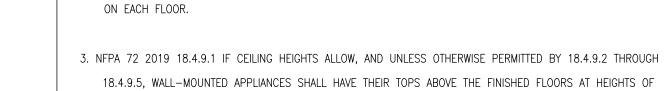


FIRE ALARM - PHONE CONNECTION F

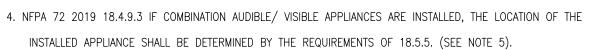


FIRE ALARM - CEILING TO WALL TRANSITION AND OPEN WIRING F





AND NOT MORE THAN 48in FROM THE FINISHED FLOOR.

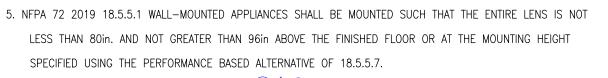


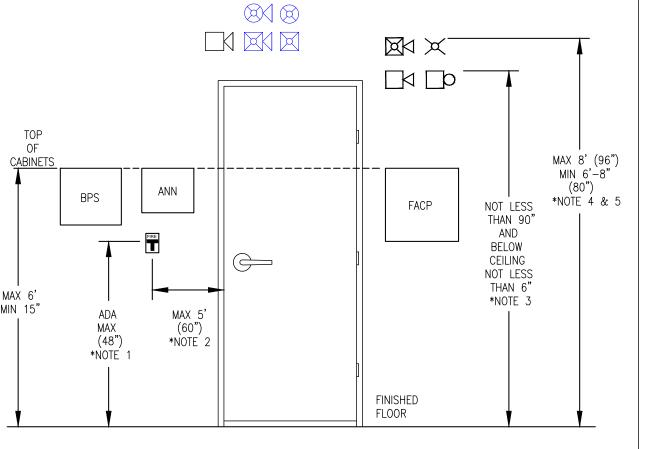
TYPICAL MOUNTING HEIGHTS

1. NFPA 72 2019 17.15.6 THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL BE NOT LESS THAN 42in

2. NFPA 72 2019 17.15.9.4 MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 5ft OF EACH EXIT DOORWAY

NOT LESS THAN 90in AND BELOW THE FINISHED CEILINGS AT DISTANCES OF NOT LESS THAN 6in.





FIRE ALARM - DROP CEILING & J BOX

