City of Puyallup
Fire
REVIEWED FOR COMPLIANCE
DDrake
08/04/2025
1:45:48 PM

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.

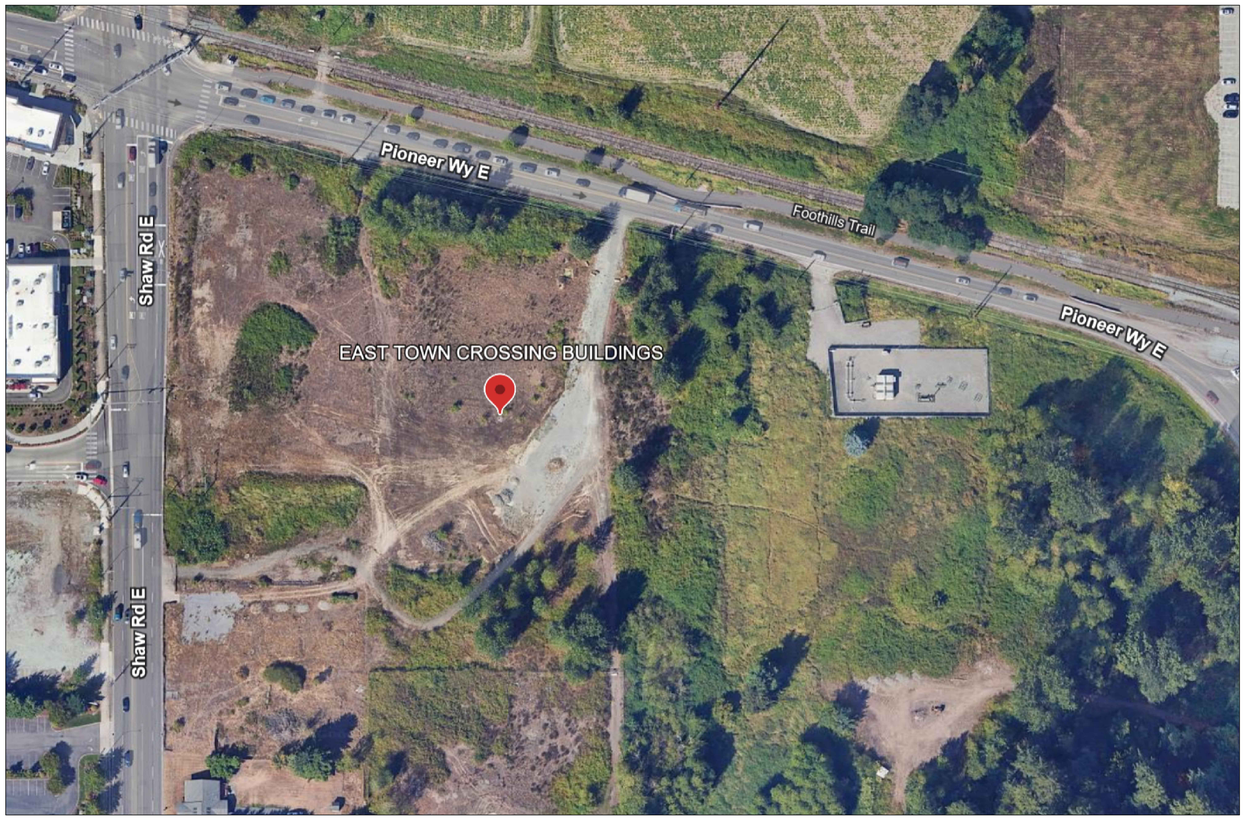
EAST TOWN CROSSING BUILDING D

SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

FIRE ALARM SYSTEM



GENERAL NOTES

1. THESE DRAWINGS DEPICT GENERAL LOCATIONS OF LIFE SAFETY EQUIPMENT & FIELD DEVICES. EXACT ROUTING OF CONDUITS TO BE DETERMINED IN THE FIELD BY THE INSTALLING CONTRACTOR TO SUIT CONDITIONS.
2. ALL FIRE ALARM SYSTEM WIRING SHALL BE CLEAR FROM SHORTS, OPENS AND GROUNDS.
3. SHOULD ANY CONDITIONS EXIST THAT DIFFER FROM WHAT IS INDICATED ON THESE DRAWINGS WHICH CAUSE MAJOR DEVIATIONS IN THE WORK SHOWN, THE CONTRACTOR SHALL CONTACT THE DESIGNER IN A TIMELY MANNER SO AS NOT TO IMPAIR THE CONSTRUCTION SCHEDULE.
4. CONTRACTOR IS RESPONSIBLE FOR MAKING AND OBTAINING APPROVAL FOR ALL NECESSARY ADJUSTMENTS IN CIRCUITING AS REQUIRED TO ACCOMMODATE THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE AFFECTED BY ANY AUTHORIZED CHANGE.
5. THE POWER CIRCUIT TO THE FACP AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED 120V, 20A BRANCH CIRCUIT BREAKER, AND SHALL HAVE A RED MARKING, LOCK-ON PROVISION AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL." THE LOCATION OF THE CIRCUIT DISCONNECT MEANS (CIRCUIT BREAKER) SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
6. ANY SMOKE DETECTOR HEAD INSTALLED BEFORE THE BUILDING IS CLEANED AND ACCEPTED SHALL BE COVERED TO PROTECT FROM DUST.
7. INSTALLATION OF DEVICES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. POWER LIMITED AND NON-POWER LIMITED FIELD WIRING MUST BE INSTALLED WITHIN THE FACP ENCLOSURE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8. ALL WIRING SHALL BE INSTALLED ACCORDING TO NFPA 70 (NEC).
9. FIRE ALARM CIRCUITS EXTENDING BEYOND ONE BUILDING AND RUN OUTDOORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70 ARTICLES 760, 770, 725 AND 800 WHERE APPLICABLE.
10. ALL WIRING, INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
11. ALL SHIELDED WIRE MUST HAVE SHIELD CONTINUITY AT FULL LENGTH OF THE WIRE.
12. ONLY FIRE ALARM SYSTEM WIRING CAN BE RUN IN THE SAME CONDUIT.
13. MAINTAIN 40 PERCENT MAXIMUM CONDUIT FILL RATIO AS PER NEC REQUIREMENTS.
14. EXISTING CONDUITS MAY BE USED BY THE INSTALLATION CONTRACTOR AS DEEMED NECESSARY, HOWEVER, ANY EXISTING CONDUIT WILL BE USED ONLY IF CONDUITS MEET CURRENT STANDARDS AND CODES.
15. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY A CENTRAL UL LISTED MONITORING STATION.
16. ALL CEILINGS ARE ASSUMED TO BE 10' A.F.F., SMOOTH CONSTRUCTION UNLESS NOTED OTHERWISE.

SCOPE OF WORK

NEW MANUAL AND AUTOMATIC FIRE ALARM SYSTEM IN A NEW RESIDENTIAL BUILDING. NEW FIRE ALARM PANEL IS BEING INSTALLED ALONG WITH NOTIFICATION DEVICES AS PER THE APPLICABLE CODES, WITH PULL STATIONS AT EVERY EXIT. SPRINKLER WATERFLOW SWITCH IS BEING MONITORED TO ACTIVATE NOTIFICATION DEVICES UPON ALARM.

APPLICABLE CODES

INTERNATIONAL BUILDING CODE - 2021 ED.
INTERNATIONAL MECHANICAL CODE - 2021 ED.
UNIFORM PLUMBING CODE - 2021 ED.
INTERNATIONAL FUEL GAS CODE - 2021 ED.
INTERNATIONAL ENERGY CONSERVATION CODE - 2021 ED.
NATIONAL ELECTRICAL CODE - 2023 ED.
INTERNATIONAL FIRE CODE - 2021 ED.
ADA STANDARDS FOR ACCESSIBLE DESIGN - 2010 ED.
NFPA 72 2019 EDITION

CONTRACTOR INFO

SYSTEM DESIGNER/INSTALLER
NAME: MAX POWER ELECTRIC
EMAIL: jeremey@maxpowernw.com
PHONE #: 253-838-4400

DRAWINGS PREPARED BY
JEM SYSTEMS LLC
hmadera@jemsystems.com
480-977-3555

MONITORING COMPANY

NAME: NORTHWEST ALARM MONITORING LLC
EMAIL: 877-870-0910
PHONE #: 1743 1ST AVE S STE 201, SEATTLE, WA 98134

SHEET INDEX

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
Expires 07/2027

MAX POWER
FIRE SYSTEM INSTALLATION

PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:
FIRE ALARM SYSTEM
COVER SHEET

DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

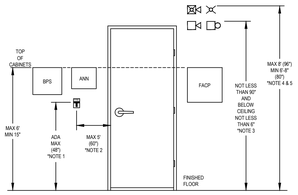
SHEET:
FA-00

BUILDING DATA

CONSTRUCTION TYPE:	V-B	FIRE PROTECTION:	FULLY SPRINKLERED
OCCUPANCY GROUP:	R-2	NUMBER OF STORIES:	3
OCCUPANT LOAD:	150	WORK AREA:	30,266 SQFT

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 AND NOT MORE THAN 48in FROM THE FINISHED FLOOR.
2. NFPA 72 2019 17.15.9.4 MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 5ft OF EACH EXIT DOORWAY ON EACH FLOOR.
3. NFPA 72 2019 18.4.9.1 IF CEILING HEIGHTS ALLOW, AND UNLESS OTHERWISE PERMITTED BY 18.4.9.2 THROUGH 18.4.9.5, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90in AND BELOW THE FINISHED CEILINGS AT DISTANCES OF NOT LESS THAN 6in.
4. NFPA 72 2019 18.4.9.3 IF COMBINATION AUDIBLE/ VISIBLE APPLIANCES ARE INSTALLED, THE LOCATION OF THE INSTALLED APPLIANCE SHALL BE DETERMINED BY THE REQUIREMENTS OF 18.5.5. (SEE NOTE 5).
5. NFPA 72 2019 18.5.5.1 WALL-MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80in. AND NOT GREATER THAN 96in ABOVE THE FINISHED FLOOR OR AT THE MOUNTING HEIGHT SPECIFIED USING THE PERFORMANCE BASED ALTERNATIVE OF 18.5.5.7.



EQUIPMENT LIST

SYMBOL	QUANTITY	MANUFACTURER	PART NO	DESCRIPTION
FACU	1	POTTER	IPA-4000	FIRE ALARM CONTROL PANEL
	1	POTTER	UD-2000	PFC SERIES DIGITAL ALARM COMMUNICATOR TRANSMITTER
DOC	1	SPACE AGE ELECTRONICS	SSU00685	FIRE ALARM DOCUMENT CABINET
NAC	2	POTTER	PSN-106	10A CONVENTIONAL POWER SUPPLY
CELL	1	POTTER	INTELLICOM-5GV	COMMUNICATOR
ANN	4	POTTER	PAD100-DIM	ADDRESSABLE DUAL MONITOR MODULE
H	7	POTTER	PAD300-HD W/PAD300-6DB	ADDRESSABLE HEAT DETECTOR WITH STANDARD BASE
S	1	POTTER	PAD300-PD W/PAD300-6DB	ADDRESSABLE SMOKE DETECTOR WITH STANDARD BASE
F WP	6	POTTER	RMS-1T-WP	CONVENTIONAL PULL STATION, WEATHERPROOF
WP	7	POTTER	HS-24WR-WP	HORN STROBE, WALL, RED, WEATHERPROOF
LF	70	POTTER	PE-LFHNW	LOW FREQUENCY HORN, WALL, WHITE
LF	14	POTTER	PE-LFHSW	LOW FREQUENCY HORN/STROBE, WALL, WHITE, 177 FIXED CANDELA
	8	POTTER	PE-STW	STROBE, WALL, WHITE

CABLE AND WIRE LEGEND

LABEL	PART NO	RESISTANCE MFT	AWG	DESCRIPTION	TOTAL LENGTH
D	16/2 FPLP (SLC)	4.10	16	SLC - 2 COND. SOLID COPPER FPLP ADDRESSABLE UNSHIELDED	435'
E	RJ31X (PHIL)	16.14	22	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED	5'
V	14/2 FPLP (NAC)	2.60	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	3445'
Z	18/2 FPLP (IDC)	6.50	18	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED	539'

Party Site No.: **3670243**
Expires: **31-Dec-2025**

CERTIFICATE OF COMPLIANCE

THIS IS TO CERTIFY that the Alarm / Service Company identified below is included by - UL Solutions (UL) in its UL Product iQ directories as eligible to use the UL Listing Mark in connection with Certificated Systems. The only evidence of compliance with UL's requirements is the issuance of a UL Certificate for the System and the Certificate is active under UL's Certificate Verification Service. This Certificate does not apply in any way to the communication channel between the protected property and any facility that monitors signals from the protected property.

Listed Service From: FIFE, WASHINGTON

Alarm / Service Company: (3670243)

Max Power Electric, LLC
5009 Pacific Hwy E Ste 13
Fife, Washington 98424-2644 UNITED STATES

The Alarm / Service Company is Listed in the following Certificate Service Categories:

File	Vol No.	CCN	Listing Category
S36997	1	UUFX	Central-station Protective Signaling Services

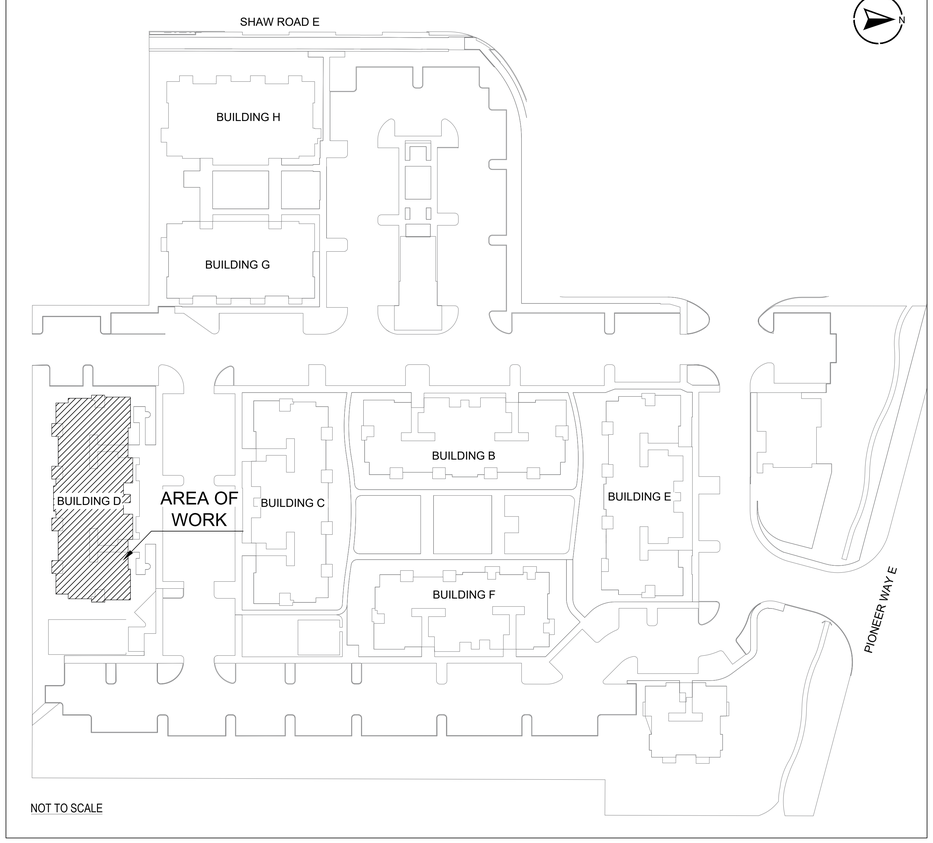
*****THIS CERTIFICATE EXPIRES ON 31-DEC-25*****

"LOOK FOR THE UL ALARM / SYSTEM CERTIFICATE"

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

SITE PLAN



NOT TO SCALE

EVENT / ACTION

EVENT	TROUBLE SIGNAL @ FIRE ALARM CONTROL PANEL	SUPERVISORY SIGNAL @ FIRE ALARM CONTROL PANEL	ALARM SIGNAL @ FIRE ALARM CONTROL PANEL	TROUBLE SIGNAL @ OFF SITE MONITORING	SUPERVISORY SIGNAL @ OFF SITE MONITORING	ALARM SIGNAL @ OFF SITE MONITORING	ACTIVATE NOTIFICATION DEVICES	ACTIVATE EXTERIOR NOTIFICATION DEVICE AT F.D. RESPONSE POINT
SMOKE/HEAT DETECTOR			●			●	●	
MANUAL PULL STATION			●			●	●	
WATERFLOW SWITCH			●			●	●	●
TAMPER SWITCH		●			●			
FACP AC POWER FAILURE	●			●				
SYSTEM LOW BATTERY	●			●				
OPEN CIRCUIT	●			●				
GROUND FAULT	●			●				
NOTIFICATION APPLIANCE CIRCUIT SHORT	●			●				
CELLULAR DISCONNECT	●			●				

NOTE: ALL SIGNALS WILL BE SENT TO A CENTRAL STATION

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
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MAX POWER
FIRE SYSTEM INSTALLATION

PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:
FIRE ALARM SYSTEM
PROJECT INFORMATION

DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

SHEET:
FA-01

PANEL F1 (IPA-4000) BATTERY CALCULATION
(SECONDARY POWER SOURCE REQUIREMENTS)

PANEL COMPONENTS		QTY	PART NO.	DESCRIPTION	STANDBY CURRENT CURRENT DRAW (A)	STANDBY CURRENT TOTAL (A)	SECONDARY ALARM CURRENT CURRENT DRAW (A)	SECONDARY ALARM CURRENT TOTAL (A)
		1	IPA-4000 MAIN BOARD	MAIN BOARD FOR IPA-4000 FIRE ALARM CONTROL PANEL	0.13	0.13	0.22	0.22
		1	UD-2000	PFC SERIES DIGITAL ALARM COMMUNICATOR TRANSMITTER	0.016	0.016	0.023	0.023
CIRCUIT	**SYMBOL**	**QTY**	**PART NO**	**DESCRIPTION**	**CURRENT DRAW (A)**	**TOTAL (A)**	**CURRENT DRAW (A)**	**TOTAL (A)**
F1•L1	KIN	4	PAD100-DIM	DUAL INPUT MODULE	0.00024	0.00096	0.00024	0.00096
	H	7	PAD300-HD W/PAD300-6DB	HEAT DETECTOR WITH 6" STANDARD BASE	0.0003	0.0021	0.0003	0.0021
	S	1	PAD300-PD W/PAD300-6DB	PHOTOELECTRIC SMOKE DETECTOR WITH 6" STANDARD BASE	0.0003	0.0003	0.0003	0.0003
F1•N1	NAC	1	PSN-106	10A CONVENTIONAL POWER SUPPLY WITH 6 OUTPUTS	0.015	0.015	0.015	0.015
F1•N2	NAC	1	PSN-106	10A CONVENTIONAL POWER SUPPLY WITH 6 OUTPUTS	0.015	0.015	0.015	0.015
F1•N3	WP	1	HS-24WR-WP	OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED 75CD	0	0	0.112	0.112
F1•N4	WP	6	HS-24WR-WP	OUTDOOR HORN STROBE, FIXED 75 CANDELA, STANDARD ENCLOSURE, RED 75CD	0	0	0.112	0.6720
F1•DACT	CELL	1	INTELLICOM-5GV	5G LTE-M DUAL PATH COMMERCIAL FIRE ALARM COMMUNICATOR (VERIZON)	0	0	0	0
					TOTAL STANDBY (A)	0.17936	TOTAL ALARM (A)	1.06
					REQUIRED STANDBY TIME (HOURS)	24		
					REQUIRED ALARM TIME (MINUTES)	5		
SECONDARY STANDBY LOAD (A)				0.17936	24		4.30	
SECONDARY ALARM LOAD (A)				1.06	0.083		0.088	
STANDBY AND ALARM SUBTOTAL (AMP HOURS)					4.39			
DERATING FACTOR					1.25			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					5.49			
PROVIDE (2) 12V 8AH BATTERIES								

PANEL F1•N1•01 EOL 5.1K
P1 (PSN-106) BATTERY CALCULATION
(SECONDARY POWER SOURCE REQUIREMENTS)

PANEL COMPONENTS		QTY	PART NO.	DESCRIPTION	STANDBY CURRENT CURRENT DRAW (A)	STANDBY CURRENT TOTAL (A)	SECONDARY ALARM CURRENT CURRENT DRAW (A)	SECONDARY ALARM CURRENT TOTAL (A)
		1	PSN-106 MAIN BOARD	PSN-106 MAIN BOARD	0.075	0.075	0.075	0.075
CIRCUIT	**SYMBOL**	**QTY**	**PART NO**	**DESCRIPTION**	**CURRENT DRAW (A)**	**TOTAL (A)**	**CURRENT DRAW (A)**	**TOTAL (A)**
P1•N1	LF	4	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.392
P1•N2	LF	4	PE-LFHSW	LED LOW PROFILE HORN STROBE, LOW FREQUENCY, 177 CANDELA, WHITE 177CD	0	0	0.256	1.02
		2	PE-STW	LED STROBE, 24 VDC, WHITE 15CD	0	0	0.022	0.044
P1•N3	LF	3	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.294
	LF	3	PE-LFHSW	LED LOW PROFILE HORN STROBE, LOW FREQUENCY, 177 CANDELA, WHITE 177CD	0	0	0.256	0.7680
		2	PE-STW	LED STROBE, 24 VDC, WHITE 15CD	0	0	0.022	0.044
P1•N4	LF	8	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.7840
P1•N5	LF	8	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.7840
P1•N6	LF	12	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	1.18
					TOTAL STANDBY (A)	0.075	TOTAL ALARM (A)	5.39
					REQUIRED STANDBY TIME (HOURS)	24		
					REQUIRED ALARM TIME (MINUTES)	5		
SECONDARY STANDBY LOAD (A)				0.075	24		1.80	
SECONDARY ALARM LOAD (A)				5.39	0.083		0.44875	
STANDBY AND ALARM SUBTOTAL (AMP HOURS)					2.25			
DERATING FACTOR					1.25			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					2.81			
PROVIDE (2) 12V 7AH BATTERIES								

PANEL F1•N2•01 EOL 5.1K
P2 (PSN-106) BATTERY CALCULATION
(SECONDARY POWER SOURCE REQUIREMENTS)

PANEL COMPONENTS		QTY	PART NO.	DESCRIPTION	STANDBY CURRENT CURRENT DRAW (A)	STANDBY CURRENT TOTAL (A)	SECONDARY ALARM CURRENT CURRENT DRAW (A)	SECONDARY ALARM CURRENT TOTAL (A)
		1	PSN-106 MAIN BOARD	PSN-106 MAIN BOARD	0.075	0.075	0.075	0.075
CIRCUIT	**SYMBOL**	**QTY**	**PART NO**	**DESCRIPTION**	**CURRENT DRAW (A)**	**TOTAL (A)**	**CURRENT DRAW (A)**	**TOTAL (A)**
P2•N1	LF	4	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.392
P2•N2	LF	4	PE-LFHSW	LED LOW PROFILE HORN STROBE, LOW FREQUENCY, 177 CANDELA, WHITE 177CD	0	0	0.256	1.02
		2	PE-STW	LED STROBE, 24 VDC, WHITE 15CD	0	0	0.022	0.044
P2•N3	LF	3	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.294
	LF	3	PE-LFHSW	LED LOW PROFILE HORN STROBE, LOW FREQUENCY, 177 CANDELA, WHITE 177CD	0	0	0.256	0.7680
		2	PE-STW	LED STROBE, 24 VDC, WHITE 15CD	0	0	0.022	0.044
P2•N4	LF	8	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.7840
P2•N5	LF	8	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	0.7840
P2•N6	LF	12	PE-LFHNW	LOW PROFILE HORN, LOW FREQUENCY, WHITE	0	0	0.098	1.18
					TOTAL STANDBY (A)	0.075	TOTAL ALARM (A)	5.39
					REQUIRED STANDBY TIME (HOURS)	24		
					REQUIRED ALARM TIME (MINUTES)	5		
SECONDARY STANDBY LOAD (A)				0.075	24		1.80	
SECONDARY ALARM LOAD (A)				5.39	0.083		0.44875	
STANDBY AND ALARM SUBTOTAL (AMP HOURS)					2.25			
DERATING FACTOR					1.25			
SECONDARY LOAD REQUIREMENTS (AMP HOURS)					2.81			
PROVIDE (2) 12V 7AH BATTERIES								

LUMP SUM REPORT SUMMARY

SOURCE	CIRCUIT	PART NO	MAX. CARD CURRENT (A)	TOTAL CARD CURRENT (A)	SPARE CARD CURRENT (A)	SPARE CARD CURRENT %	MAX. CIRCUIT CURRENT (A)	TOTAL CIRCUIT CURRENT (A)	SPARE CIRCUIT CURRENT (A)	SPARE CIRCUIT CURRENT %	WIRE GAUGE	WIRE RESISTANCE (Ω/KFT)	TOTAL CIRCUIT LENGTH (FT)	TOTAL CIRCUIT RESISTANCE (Ω)	STARTING CALCULATION VOLTAGE	MIN. OPERATIONAL VOLTAGE	MAX. VOLTAGE DROP	END OF LINE VOLTAGE	VOLTAGE DROP %
F1 (IPA-4000)	N1	IPA-4000 MAIN BOARD	10	0.817360	9.18	**91.83 %**	3	0.015	2.99	**99.50 %**	14	2.60	3	0.013	20.40	16	0	20.40	**0.00 %**
	N2						3	0.015	2.99	**99.50 %**	14	2.60	4	0.0195	20.40	16	0	20.40	**0.00 %**
	N3						3	0.112	2.89	**96.27 %**	14	2.60	53	0.277853	20.40	16	0.03	20.37	**0.15 %**
	N4						3	0.6720	2.33	**77.60 %**	14	2.60	435	2.26	20.40	16	1.52	18.88	**7.45 %**
P1 (PSN-106)	N1	PSN-106 MAIN BOARD	10	5.31	4.69	**46.90 %**	3	0.392	2.61	**86.93 %**	14	2.60	111	0.577	20.40	16	0.23	20.17	**1.11 %**
	N2						3	1.07	1.93	**64.40 %**	14	2.60	79	0.410165	20.40	16	0.44	19.96	**2.15 %**
	N3						3	1.11	1.89	**63.13 %**	14	2.60	224	1.16	20.40	16	1.29	19.11	**6.31 %**
	N4						3	0.7840	2.22	**73.87 %**	14	2.60	291	1.51	20.40	16	1.19	19.21	**5.81 %**
	N5						3	0.7840	2.22	**73.87 %**	14	2.60	297	1.54	20.40	16	1.21	19.19	**5.93 %**
	N6						3	1.18	1.82	**60.80 %**	14	2.60	398	2.07	20.40	16	2.44	17.96	**11.94 %**
P2 (PSN-106)	N1	PSN-106 MAIN BOARD	10	5.31	4.69	**46.90 %**	3	0.392	2.61	**86.93 %**	14	2.60	223	1.16	20.40	16	0.45	19.95	**2.23 %**
	N2						3	1.07	1.93	**64.40 %**	14	2.60	159	0.828	20.40	16	0.880	19.52	**4.34 %**
	N3						3	1.11	1.89	**63.13 %**	14	2.60	279	1.45	20.40	16	1.61	18.79	**7.87 %**
	N4						3	0.7840	2.22	**73.87 %**	14	2.60	303	1.57	20.40	16	1.23	19.17	**6.05 %**
	N5						3	0.7840	2.22	**73.87 %**	14	2.60	337	1.75	20.40	16	1.37	19.03	**6.73 %**
	N6						3	1.18	1.82	**60.80 %**	14	2.60	447	2.32	20.40	16	2.73	17.67	**13.39 %**

CALCULATION METHODS:
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)

RADIO FIRE ALARM COMMUNICATOR

Battery Calculation Worksheet **6/16/2025**
(current values will be expressed in mA)

Device Description	Quantity of Devices	Standby mA Per Device	Alarm mA Per Device	Total Device Standby mA	Total Device Alarm mA
INTELLICOM-5GV	1	68	140	68	140
Total Current				68	140

Summary Section

	Standby Hours Required	24
	Alarm Minutes Required	5
	Total System Standby mA	68
	Total System Alarm mA	140
Standby Hours * (Total Standby mA * .001) =	***Total System Standby AH***	1.63
Alarm Minutes * .0167 * (Total Alarm mA * .001) =	***Total System Alarm AH***	0.01
Total Standby AH + Total Alarm AH =	***Total System AH***	1.64
Total System AH * 1.25 =	***Minimum Required AH***	2.05

25% CONTINGENCY FACTOR ADDED **INSTALL (1)-12VDC 12AH BATTERY**

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
Expires 07/2027

MAX POWER
FIRE SYSTEM INSTALLATION

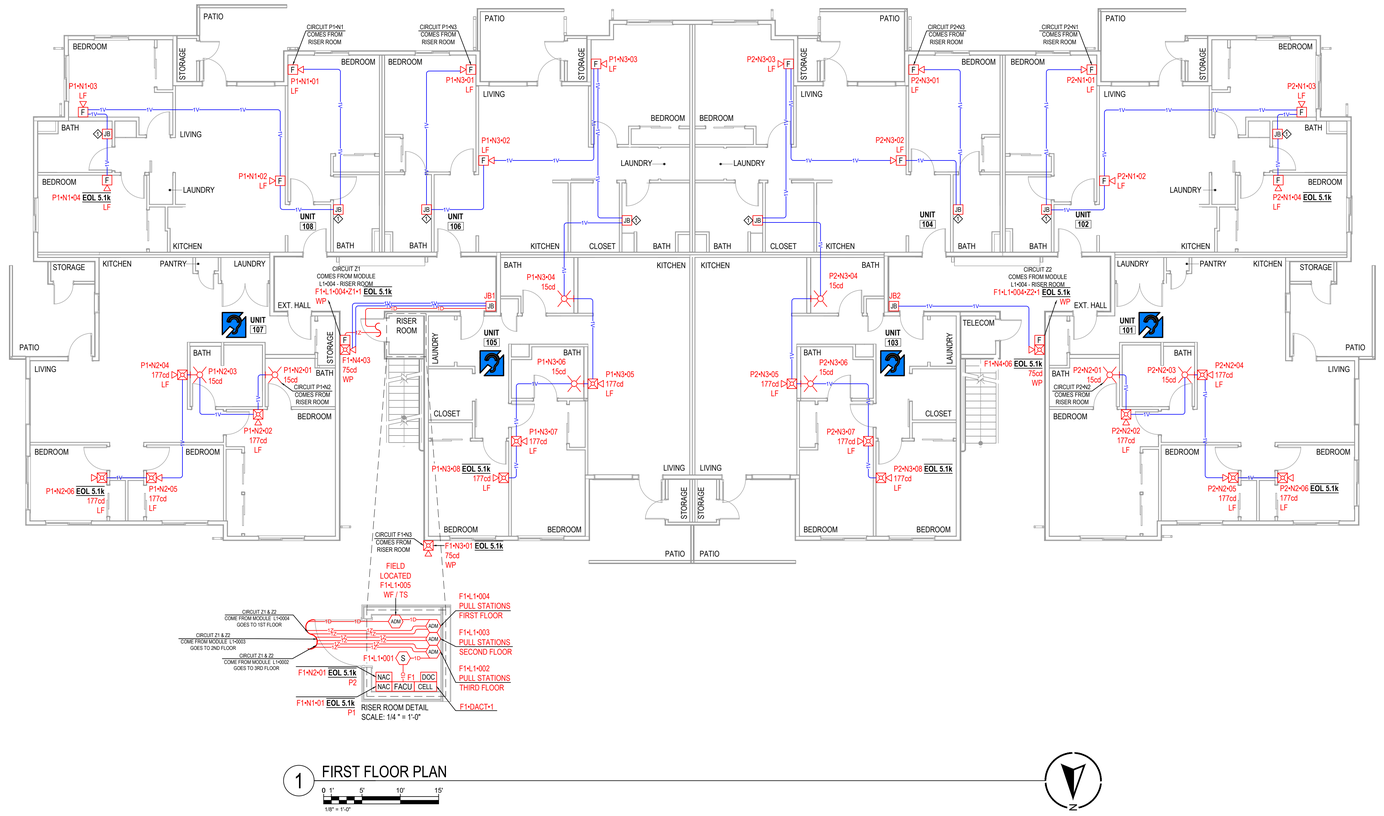
PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:
FIRE ALARM SYSTEM PROJECT CALCULATIONS

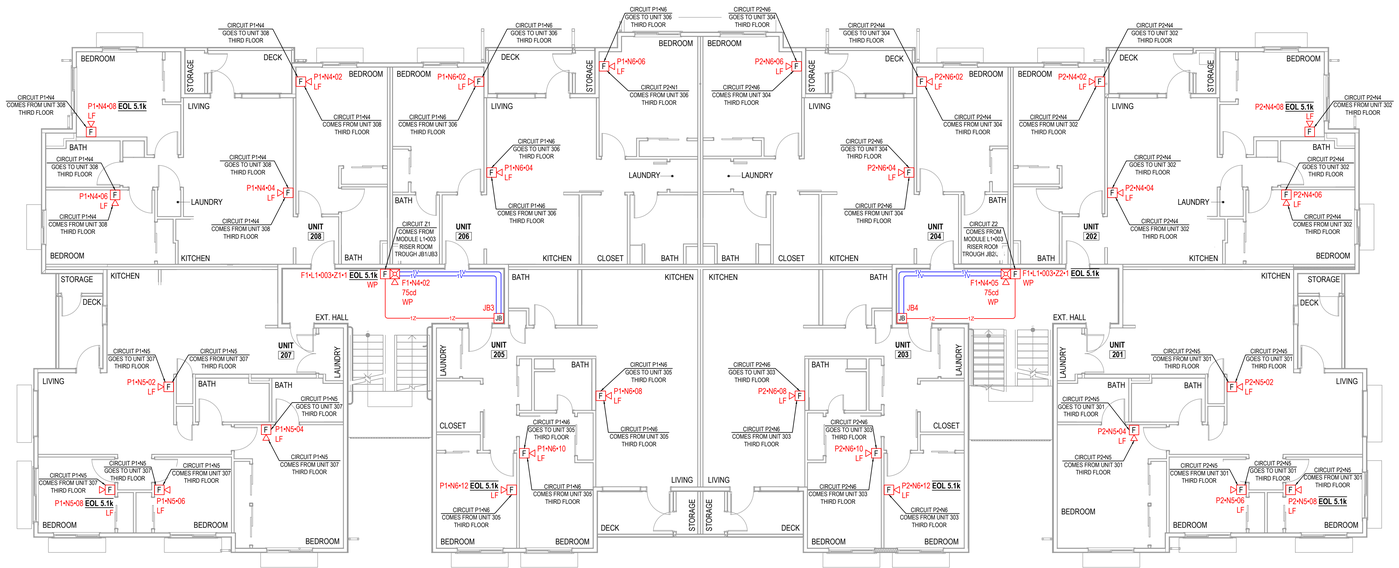
DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

SHEET:
FA-02



1 FIRST FLOOR PLAN

0 1' 5' 10' 15'
1/8" = 1'-0"



2 SECOND FLOOR PLAN

0 1' 5' 10' 15'
1/8" = 1'-0"

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

EQUIPMENT LIST	
SYMBOL	DESCRIPTION
FACU	FIRE ALARM CONTROL PANEL
DOC	FIRE ALARM DOCUMENT CABINET
NAC	10A CONVENTIONAL POWER SUPPLY
CELL	COMMUNICATOR
ADM	ADDRESSABLE DUAL MONITOR MODULE
H	ADDRESSABLE HEAT DETECTOR WITH STANDARD BASE
S	ADDRESSABLE SMOKE DETECTOR WITH STANDARD BASE
F WP	CONVENTIONAL PULL STATION, WEATHERPROOF
WP	HORN STROBE, WALL, RED, WEATHERPROOF
F LF	LOW FREQUENCY HORN, WALL, WHITE
LF	LOW FREQUENCY HORN/STROBE, WALL, WHITE, 177 FIXED CANDELA
	STROBE, WALL, WHITE
JB	JUNCTION BOX

CABLE AND WIRE LEGEND		
LABEL	AWG	DESCRIPTION
D	16	SLC - 2 COND. SOLID COPPER FPLP ADDRESSABLE UNSHIELDED
E	22	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
Z	18	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

KEY NOTES	
1	JUNCTION BOXES IN BATHROOMS ARE FOR FUTURE ADA ADAPTABILITY.

ABREVIATIONS	
WF	WATERFLOW
TS	TAMPER SWITCH

ADDRESS & LABEL CLARIFICATION

F1•L1•001
- PANEL NUMBER
- SLC LOOP NUMBER
- DEVICE ADDRESS ON SLC LOOP

F1•N1•01
- PANEL NUMBER
- NOTIFICATION CIRCUIT NUMBER
- DEVICE NUMBER ON CIRCUIT

1D
- CABLE QUANTITY
- TYPE OF CABLE (CHECK CABLE AND WIRE LEGEND)

PANEL NAME:
F1: FIRE ALARM CONTROL PANEL
P1: REMOTE POWER SUPPLY

NFPA 72 - TABLE A.18.4.4
AVERAGE AMBIENT SOUND LEVEL ACCORDING TO LOCATION

LOCATION	SOUND LEVEL (dBA)
1. BUSINESS OCCUPANCIES	54
2. EDUCATIONAL OCCUPANCIES	45
3. INDUSTRIAL OCCUPANCIES	88
4. INSTITUTIONAL OCCUPANCIES	50
5. MERCANTILE OCCUPANCIES	40
6. MECHANICAL ROOMS	91
7. PIERS AND WATER SURROUNDED STRUCTURES	40
8. PLACES OF ASSEMBLY	60
9. RESIDENTIAL OCCUPANCIES	35
10. STORAGE OCCUPANCIES	30
11. THOROUGHFARES, HIGH-DENSITY URBAN	70
12. THOROUGHFARES, MEDIUM-DENSITY URBAN	55
13. THOROUGHFARES, RURAL AND SUBURBAN	40
14. TOWER OCCUPANCIES	35
15. UNDERGROUND STRUCTURES AND WINDOWLESS BLDS	40
16. VEHICLES AND VESSELS	50

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
Expires 07/2027

MAX POWER
FIRE SYSTEM INSTALLATION

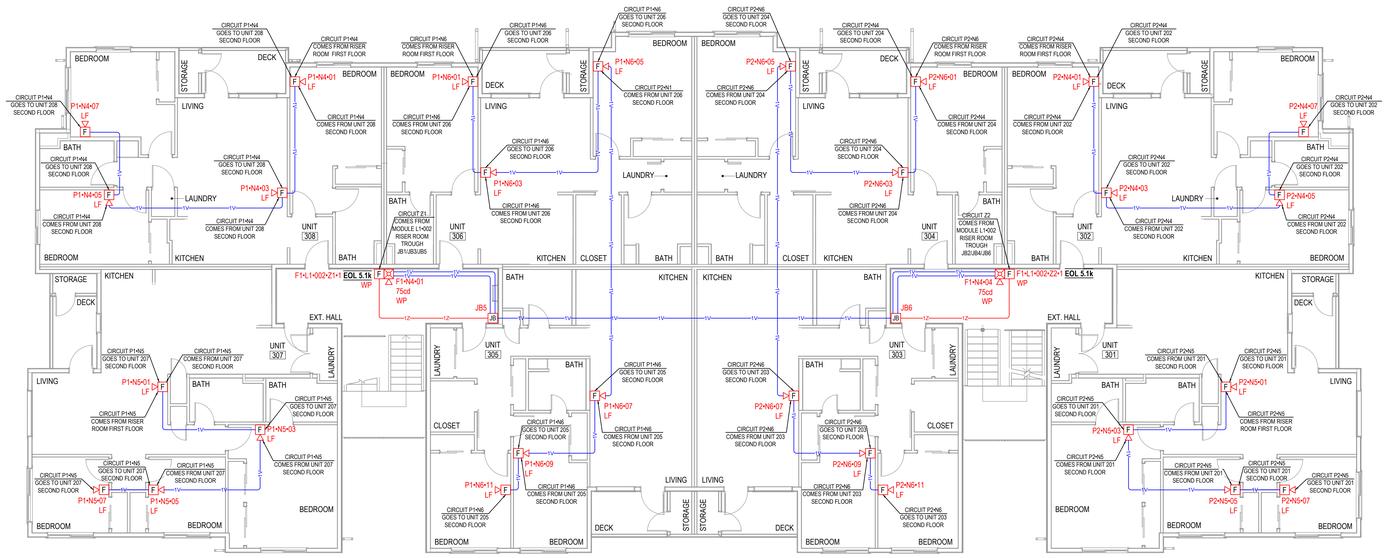
PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:
FIRE ALARM SYSTEM
FIRST & SECOND
FLOOR PLANS

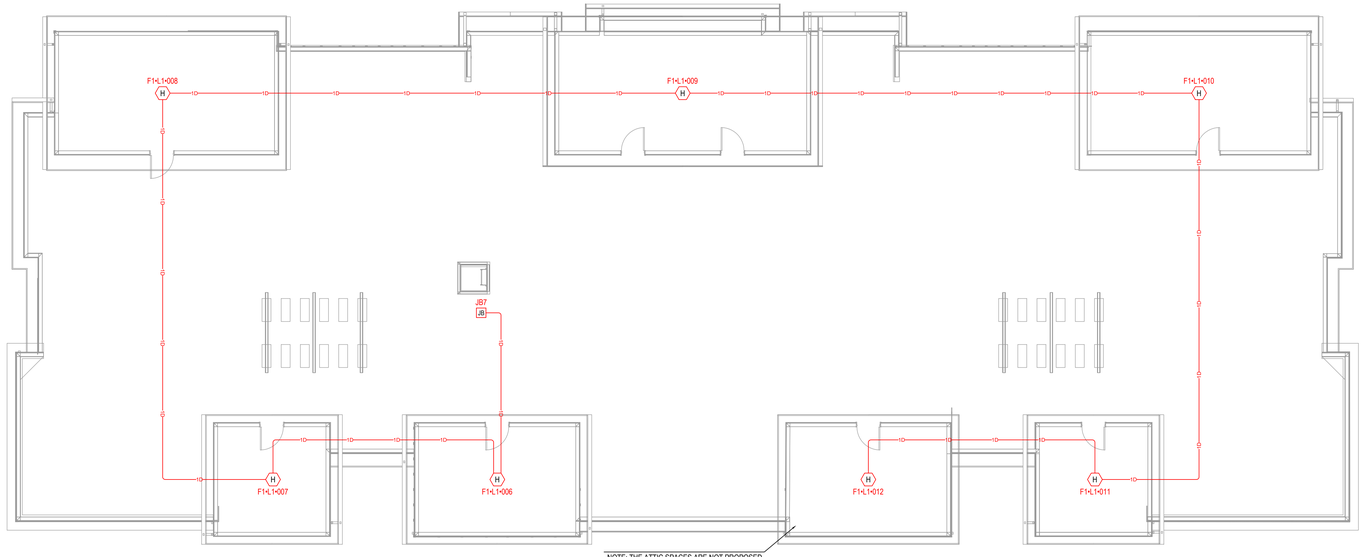
DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

SHEET:
FA-03



1 THIRD FLOOR PLAN

0 1' 5' 10' 15'
1/8" = 1'-0"



2 ROOF PLAN

0 1' 5' 10' 15'
1/8" = 1'-0"

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

EQUIPMENT LIST

SYMBOL	DESCRIPTION
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DOC	FIRE ALARM DOCUMENT CABINET
NAC	10A CONVENTIONAL POWER SUPPLY
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LF	LOW FREQUENCY HORN/STROBE, WALL, WHITE, 177 FIXED CANDELA
	STROBE, WALL, WHITE
JB	JUNCTION BOX

CABLE AND WIRE LEGEND

LABEL	AWG	DESCRIPTION
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E	22	PHONE LINE - RJ31X SOLID COPPER TWISTED SHIELDED
V	14	NAC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED
Z	18	IDC - 2 COND. SOLID COPPER FPLP ANALOG UNSHIELDED

KEY NOTES

1 JUNCTION BOXES IN BATHROOMS ARE FOR FUTURE ADA ADAPTABILITY.

ABBREVIATIONS

WF	WATERFLOW
TS	TAMPER SWITCH

ADDRESS & LABEL CLARIFICATION

F1•L1•001
- F1 — PANEL NUMBER
- L1 — SLC LOOP NUMBER
- 001 — DEVICE ADDRESS ON SLC LOOP

F1•N1•01
- F1 — PANEL NUMBER
- N1 — NOTIFICATION CIRCUIT NUMBER
- 01 — DEVICE NUMBER ON CIRCUIT

1D
- 1 — CABLE QUANTITY
- D — TYPE OF CABLE (CHECK CABLE AND WIRE LEGEND)

PANEL NAME:
F1: FIRE ALARM CONTROL PANEL
P1: REMOTE POWER SUPPLY

NFPA 72 - TABLE A.18.4.4
AVERAGE AMBIENT SOUND LEVEL ACCORDING TO LOCATION

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13. THOROUGHFARES, RURAL AND SUBURBAN	40
14. TOWER OCCUPANCIES	35
15. UNDERGROUND STRUCTURES AND WINDOWLESS BLDS	40
16. VEHICLES AND VESSELS	50

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
Expires 07/2027

MAX POWER
FIRE SYSTEM INSTALLATION

PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

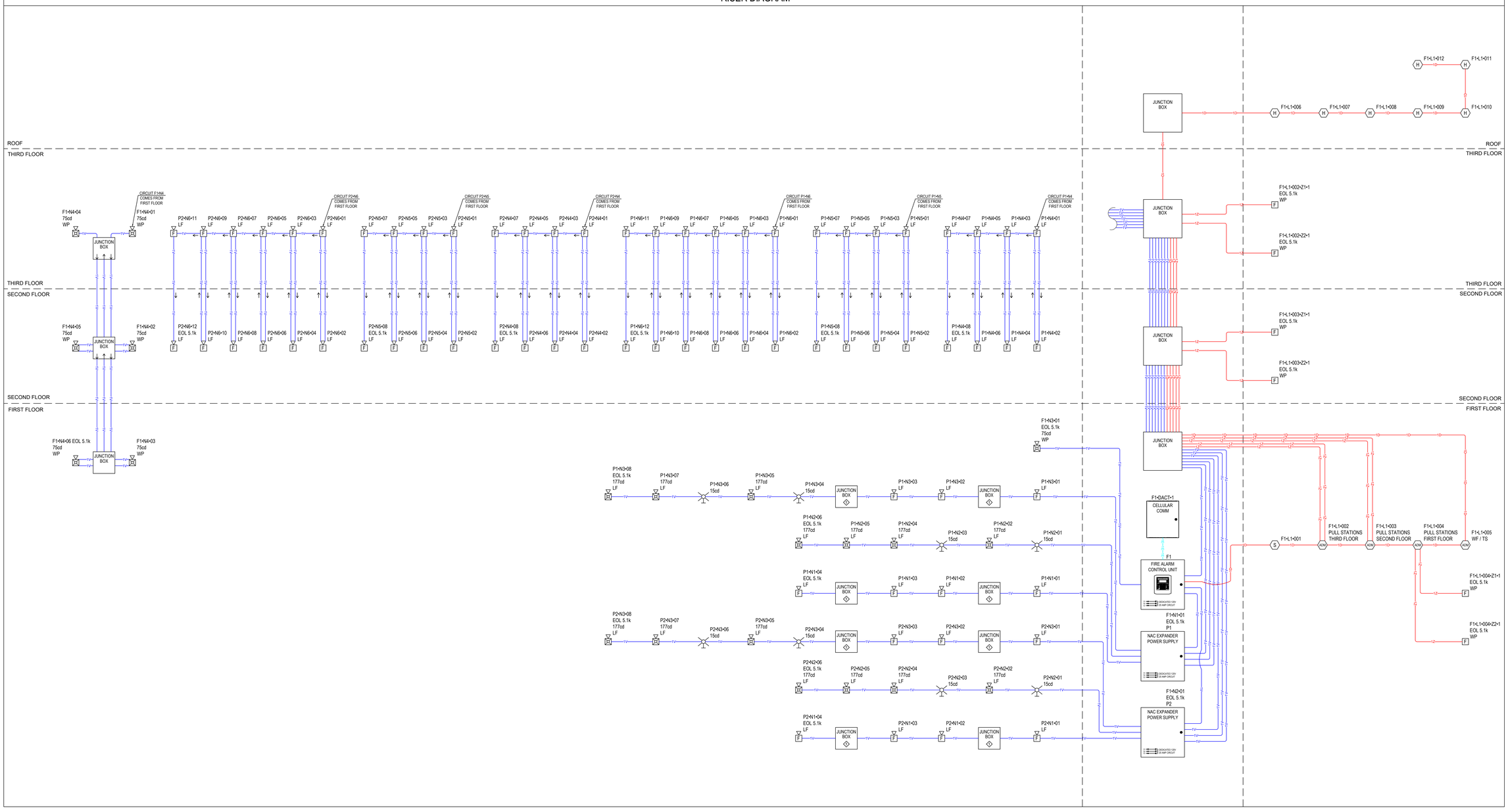
SHEET DESCRIPTION:
FIRE ALARM SYSTEM
THIRD FLOOR &
ROOF PLANS

DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

SHEET:
FA-04

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

RISER DIAGRAM



KEY NOTES

1. JUNCTION BOXES IN BATHROOMS ARE FOR FUTURE ADA ADAPTABILITY.

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
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MAX POWER
FIRE SYSTEM INSTALLATION

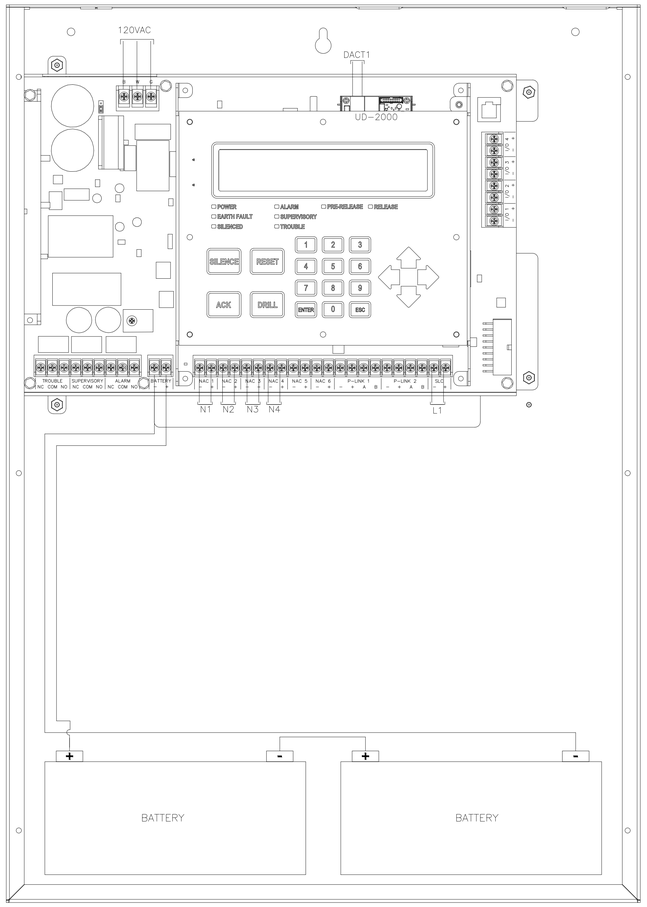
PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:
FIRE ALARM SYSTEM RISER DIAGRAM

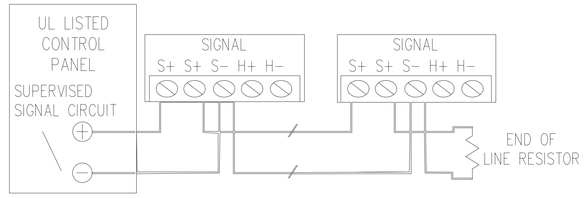
DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

SHEET:
FA-05



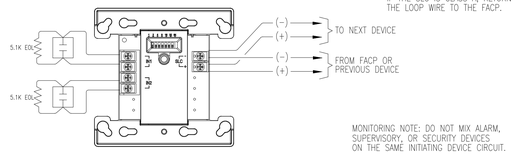
IPA-4000 / F1 / FIRE ALARM CONTROL PANEL WIRING

NOT TO SCALE



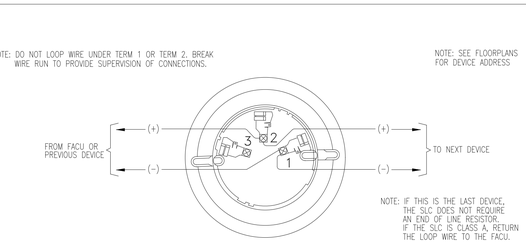
HS-24WR-WP / WEATHERPROOF HORN/STROBE WIRING

NOT TO SCALE



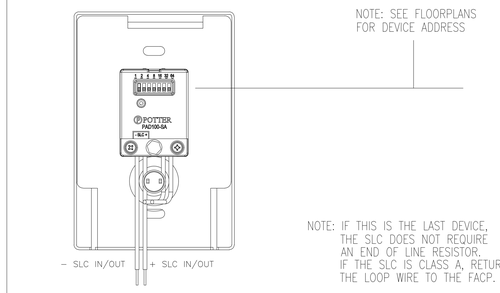
PAD100-DIM / DUAL MONITOR MODULE WIRING

NOT TO SCALE



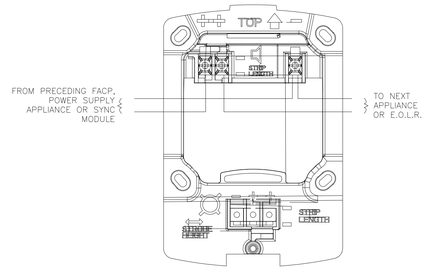
PAD300-HD W/ PAD300-6DB / HEAT DETECTOR &
PAD300-PD W/ PAD300-6DB / SMOKE DETECTOR WIRING

NOT TO SCALE



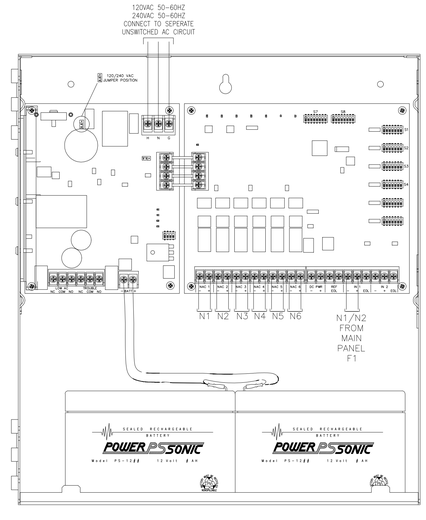
RMS-1T-WP / WEATHERPROOF PULL STATION WIRING

NOT TO SCALE



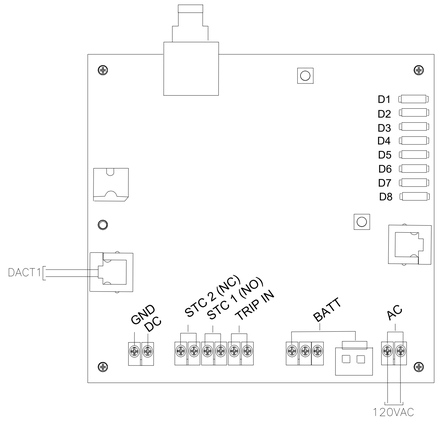
PE-LFHNW / WALL HORN
PE-LFHSW / WALL HORN/STROBE WIRING

NOT TO SCALE



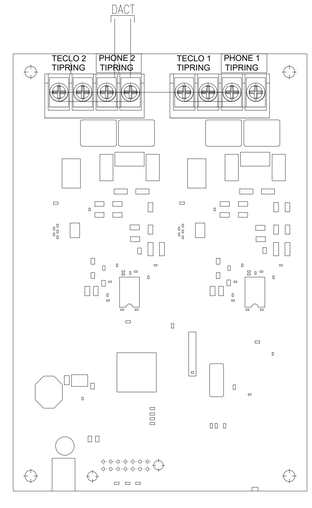
PSN-106 / P1 / P2 / POWER SUPPLY WIRING

NOT TO SCALE



INTELLICOM-5GV / COMMUNICATOR WIRING

NOT TO SCALE



UD-2000 / COMMUNICATOR TRANSMITTER WIRING

NOT TO SCALE

Jeremey Locken, ET
NICET Level III Fire Alarm
Certification #: 95603
Expires 07/2027

MAX POWER
FIRE SYSTEM INSTALLATION

PROJECT
EAST TOWN CROSSING BUILDING D
SHAW RD. E. & PIONEER WY. E.
PUYALLUP, WA 98372

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

REVISION:
FIRST RELEASE

SHEET DESCRIPTION:
FIRE ALARM SYSTEM WIRING DIAGRAMS

DRAWN BY: JEM SYSTEMS
DATE: 06.16.2025
SCALE: SEE DRAWINGS

SHEET:
FA-06