

# BRADLEY HEIGHTS

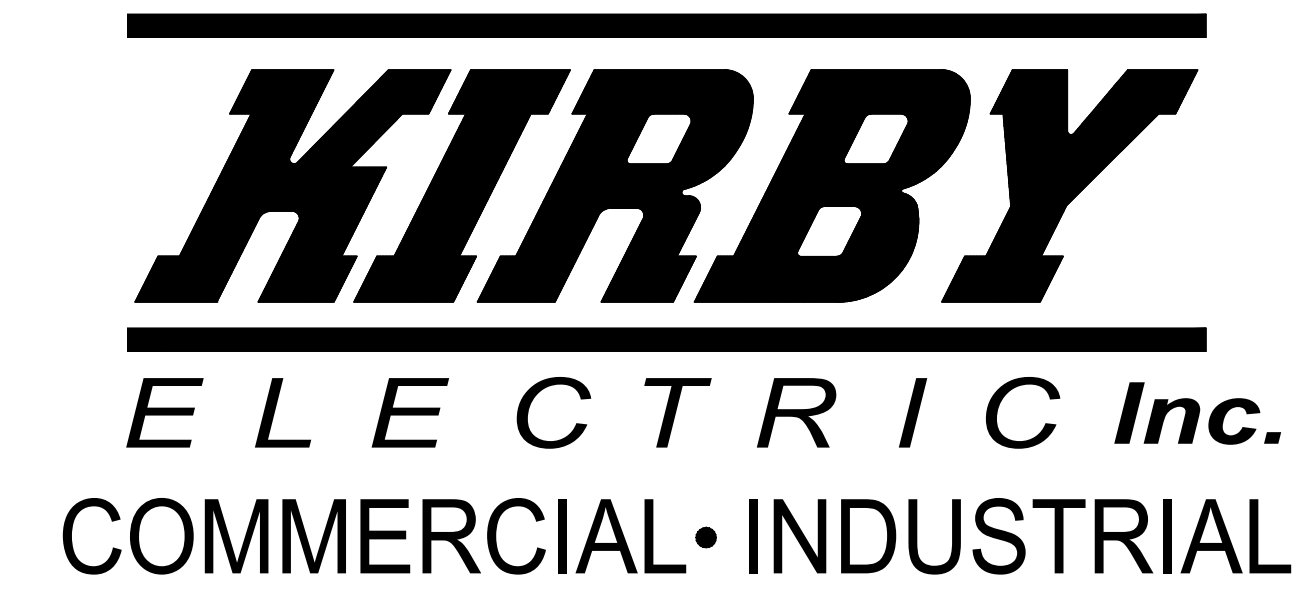
# HEIGHTS

BLDG C

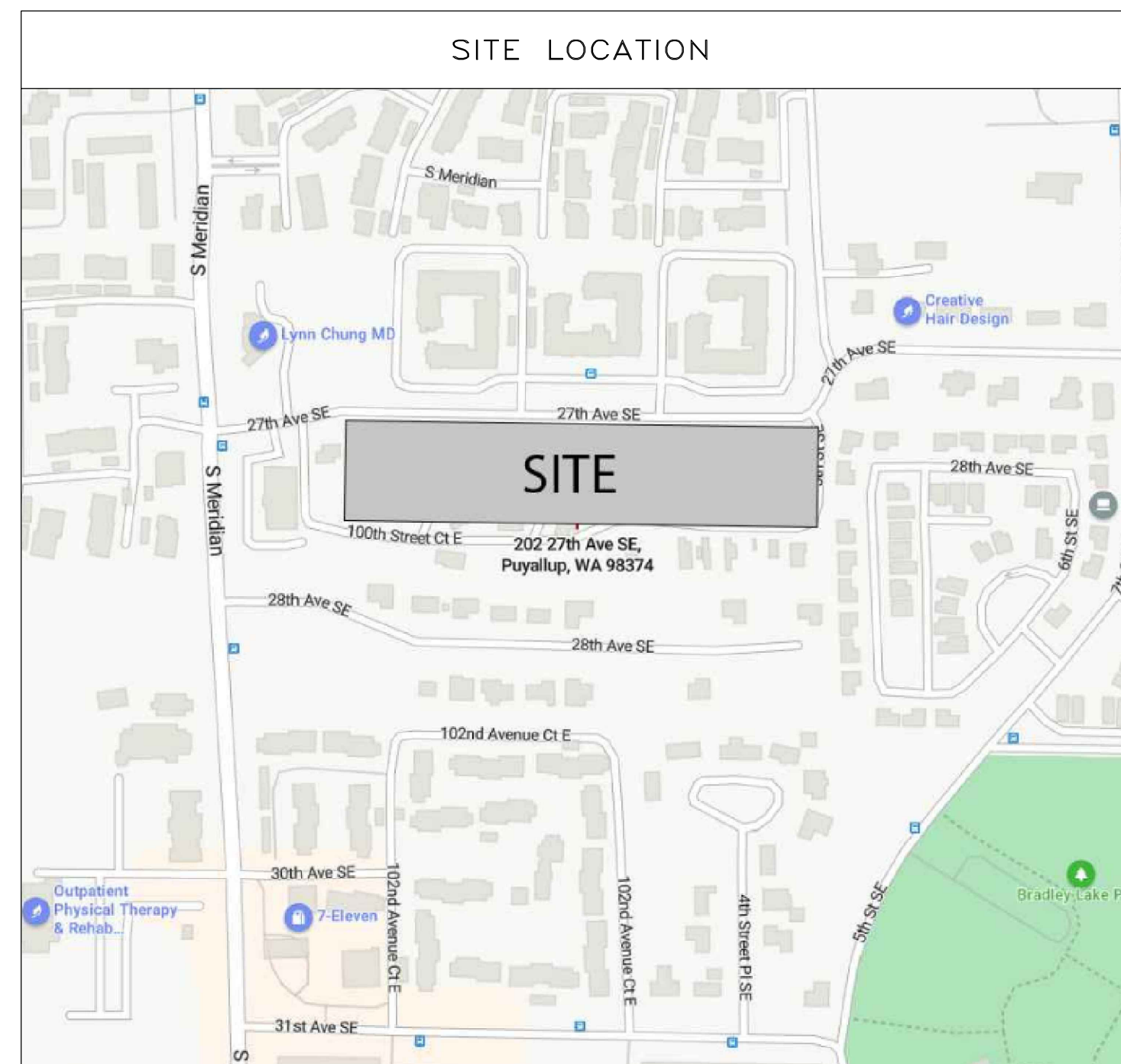
## FIRE ALARM AND DETECTION SYSTEM

### PROJECT SCOPE

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. PROVIDE AND INSTALL NEW SILENT KNIGHT 680B FIRE ALARM CONTROL PANEL AND NEW HONEYWELL HPF-PS10 REMOTE POWER SUPPLY FOR OCCUPANT NOTIFICATION.</li> <li>2. PROVIDE AND INSTALL 42 LOW FREQUENCY SOUNDER NOTIFICATION APPLIANCES.</li> <li>3. PROVIDE AND INSTALL 5 LOW FREQUENCY SOUNDER STROBE NOTIFICATION APPLIANCES.</li> <li>4. PROVIDE AND INSTALL 5 STROBE ONLY NOTIFICATION APPLIANCES.</li> <li>5. PROVIDE AND INSTALL 9 HORN/STROBE NOTIFICATION APPLIANCES &amp; 1 WATERFLOW BELL.</li> <li>6. PROVIDE AND INSTALL 15 MANUAL PULL STATIONS.</li> </ol> | <ol style="list-style-type: none"> <li>7. PROVIDE AND INSTALL 1 SMOKE DETECTOR FOR FACP &amp; PS10.</li> <li>8. PROVIDE AND INSTALL 2 DUAL-INPUT MODULES.</li> <li>9. PROVIDE AND INSTALL 9 HEAT DETECTORS.</li> <li>10. PROVIDE AND INSTALL A HONEYWELL HW-AV-LTE-M CELLULAR COMMUNICATOR.</li> </ol> |
|--|--|

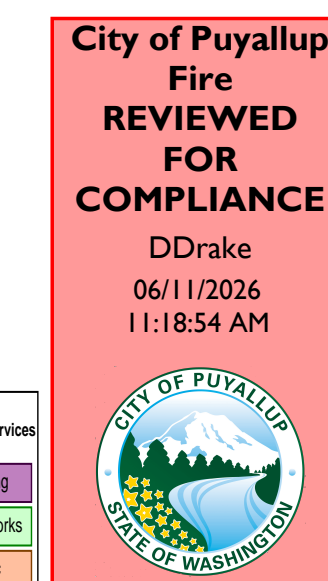


FIRE ALARM SHEET INDEX	
Sheet Number	Sheet Title
EFO.00	COVER SHEET
EFO.01	FIRE ALARM DETAILS
EFO.02	PANEL DETAILS
EFO.03	DEVICE DETAILS
EF1.01	ONE-LINE RISER DIAGRAM
EF2.01	FIRE ALARM PANEL CALCULATIONS
EF3.01	BASEMENT & LEVEL 1 FIRE ALARM PLAN
EF3.02	LEVEL 2 & 3 FIRE ALARM PLAN
EF3.03	ROOF FIRE ALARM PLAN



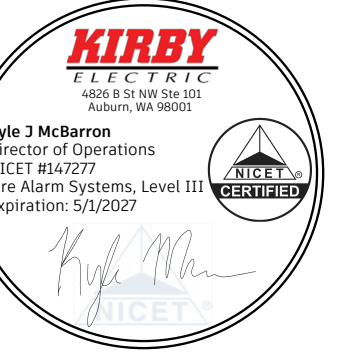
APPLICABLE CODES & STANDARDS
2022 NATIONAL FIRE ALARM & SIGNALING CODE NFPA72 2023 NATIONAL ELECTRICAL CODE (NEC) NFPA70 2021 INTERNATIONAL FIRE CODE (IFC) WITH WASHINGTON STATE AMENDMENTS 2021 INTERNATIONAL BUILDING CODE (IBC) WITH WASHINGTON STATE AMENDMENTS
OCCUPANCY & BUILDING
OCCUPANCY : R-2 USE : RESIDENTIAL BUILDING AREA : 28,504 S.F.

PROJECT CONTACTS		
PROJECT MANAGER	DENNIS RISHKOVOY	dennis@kirbyelectric.com
FOREMAN	---	---
DESIGNER	DANIEL KOPYTIN	danielko@kirbyelectric.com
DIRECTOR OF OPERATIONS	KYLE MCBARRON	kylem@kirbyelectric.com
TECHNICIAN SCHEDULING	ANDRACO DICKSON	andraco@kirbyelectric.com



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.



BRADLEY HEIGHTS  
BLDG C  
27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
A (2026-05-08) INITIAL SET

SHEET NUMBER: EFO.00

SHEET TITLE:  
COVER SHEET

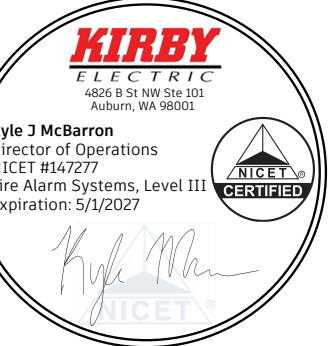
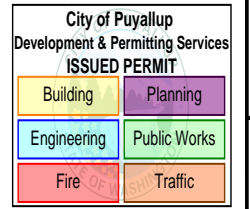
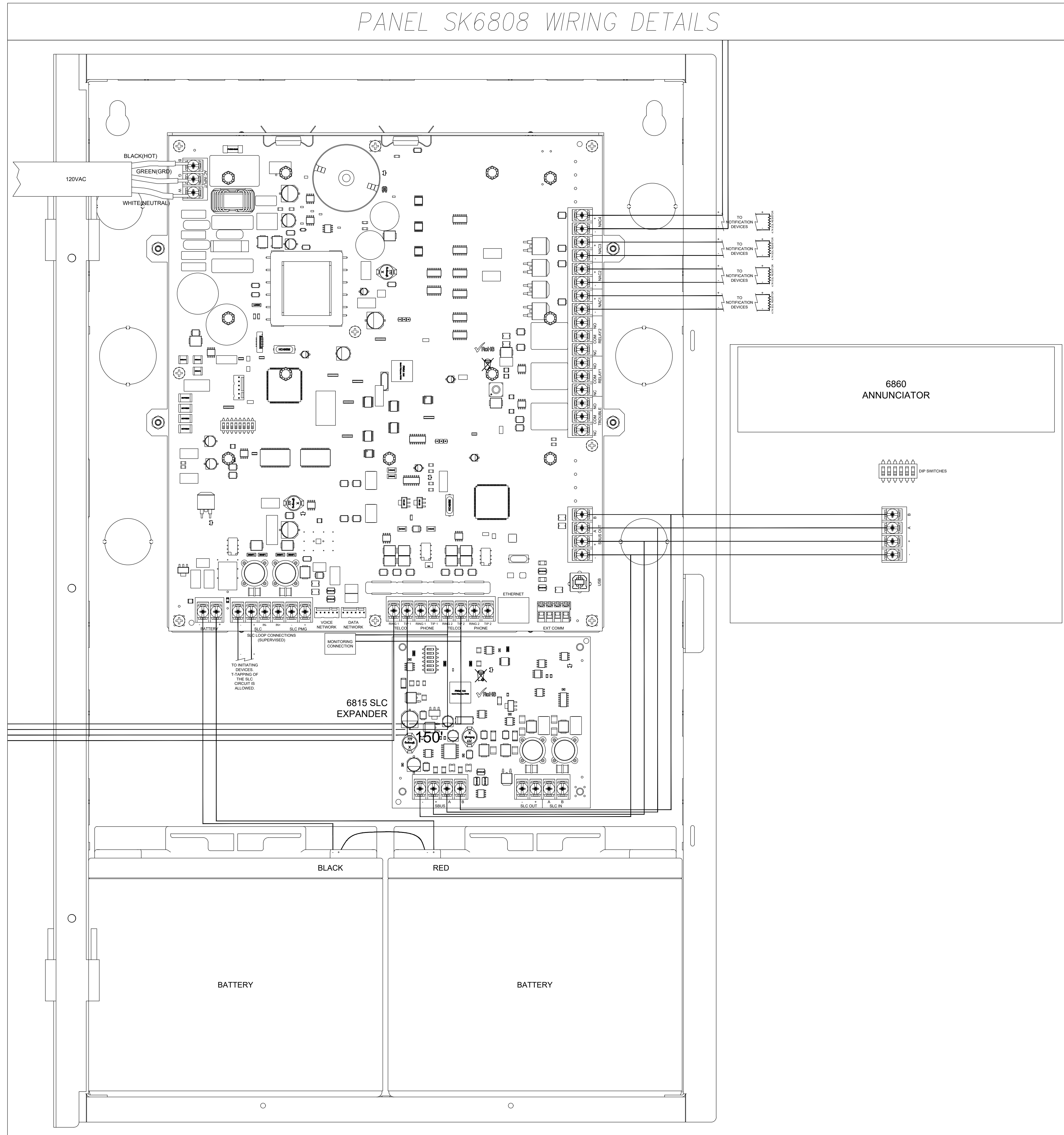
PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

JOB NUMBER: 25-058



PANEL SK6808 WIRING DETAILS



BRADLEY HEIGHTS  
BLDG C

27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
 (2026-05-08)  
 INITIAL SET

SHEET NUMBER: EF0.02

SHEET TITLE:  
 PANEL DETAILS

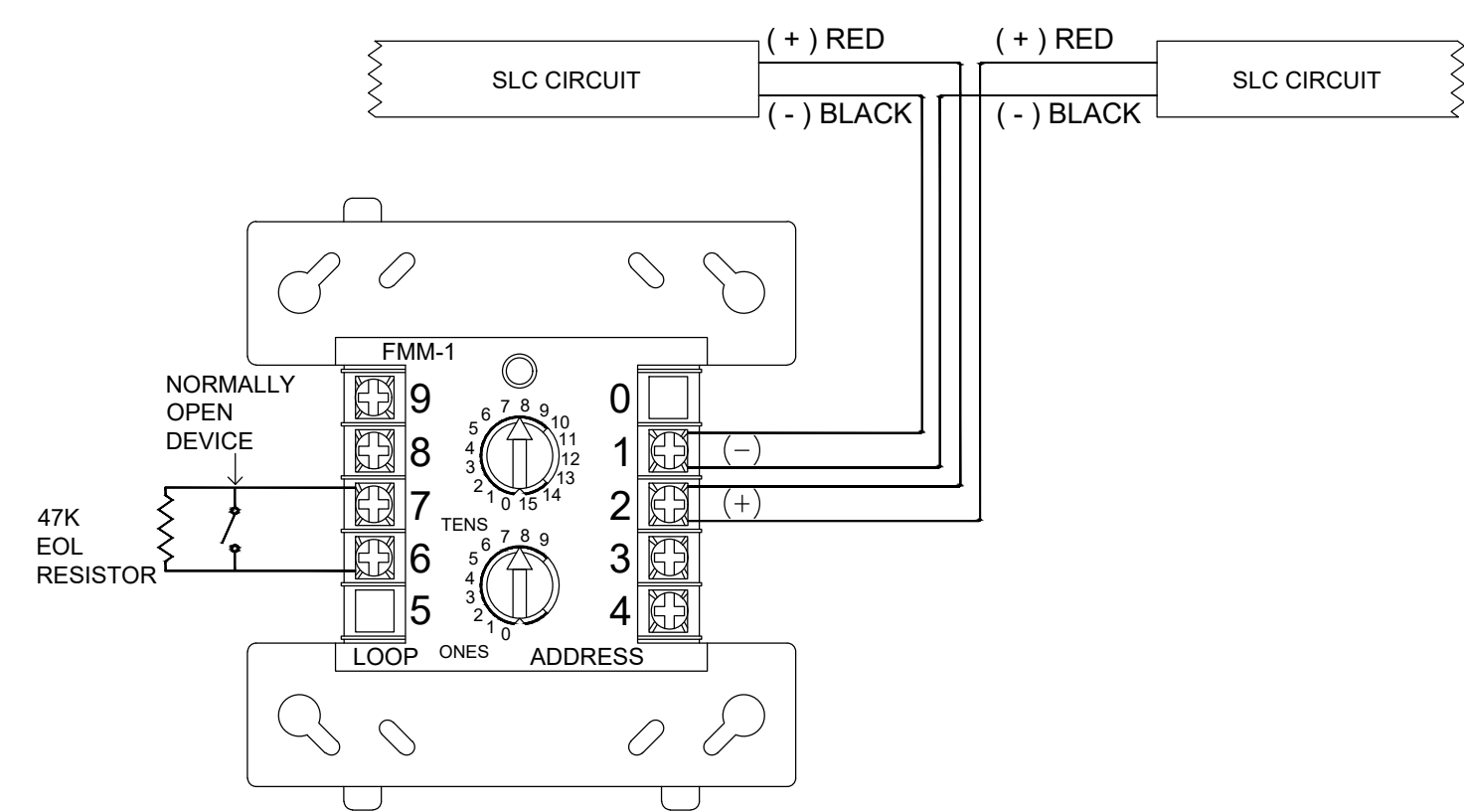
PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

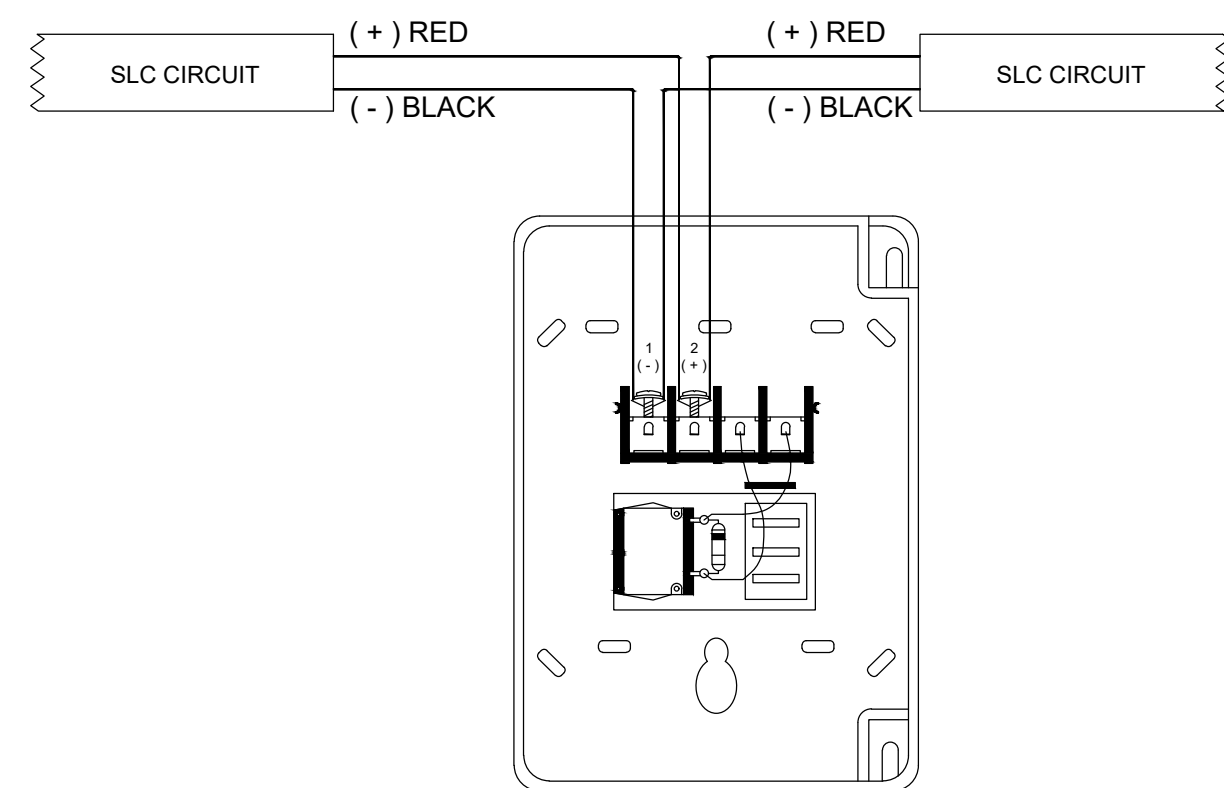
JOB NUMBER: 25-058

**KIRBY**  
 ELECTRIC  
 4826 15th St NW • Suite 101 • Auburn, WA 98001  
 P: (253) 859-2000 • F: (253) 859-2363  
 www.kirbyelectric.com

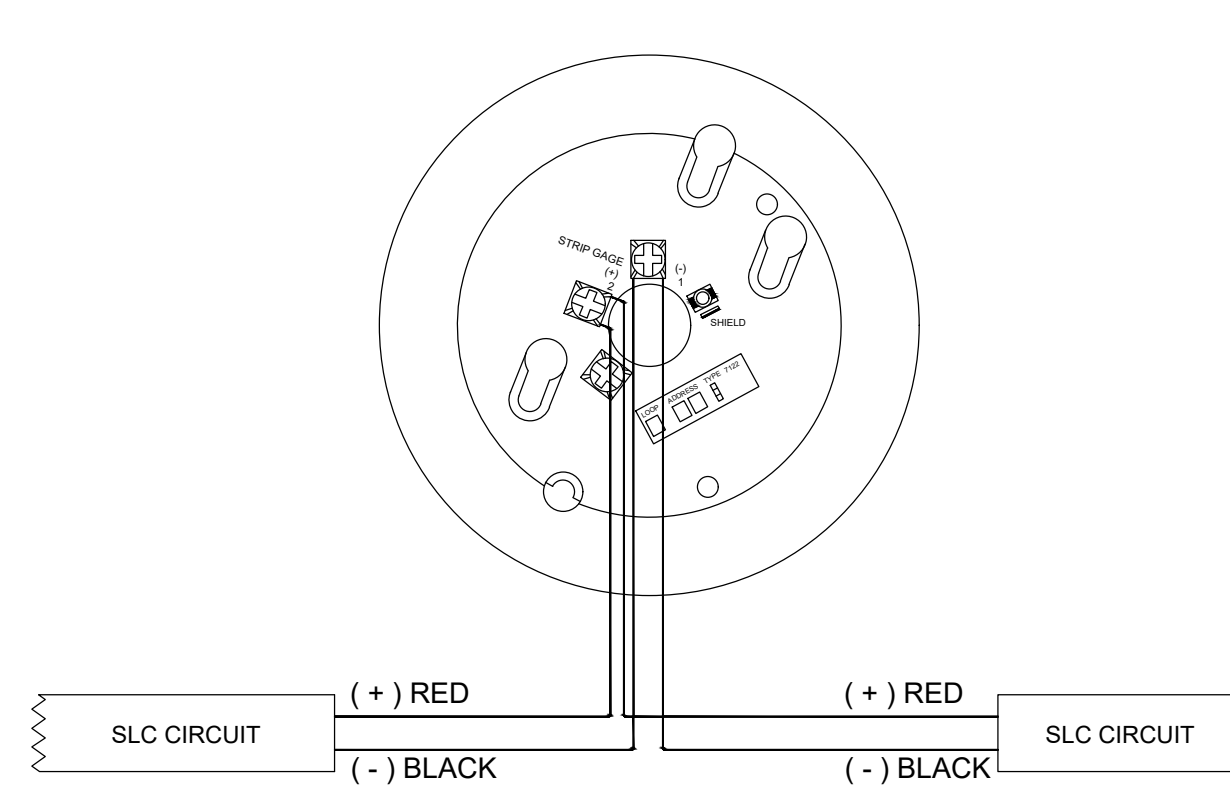
### INPUT MODULE



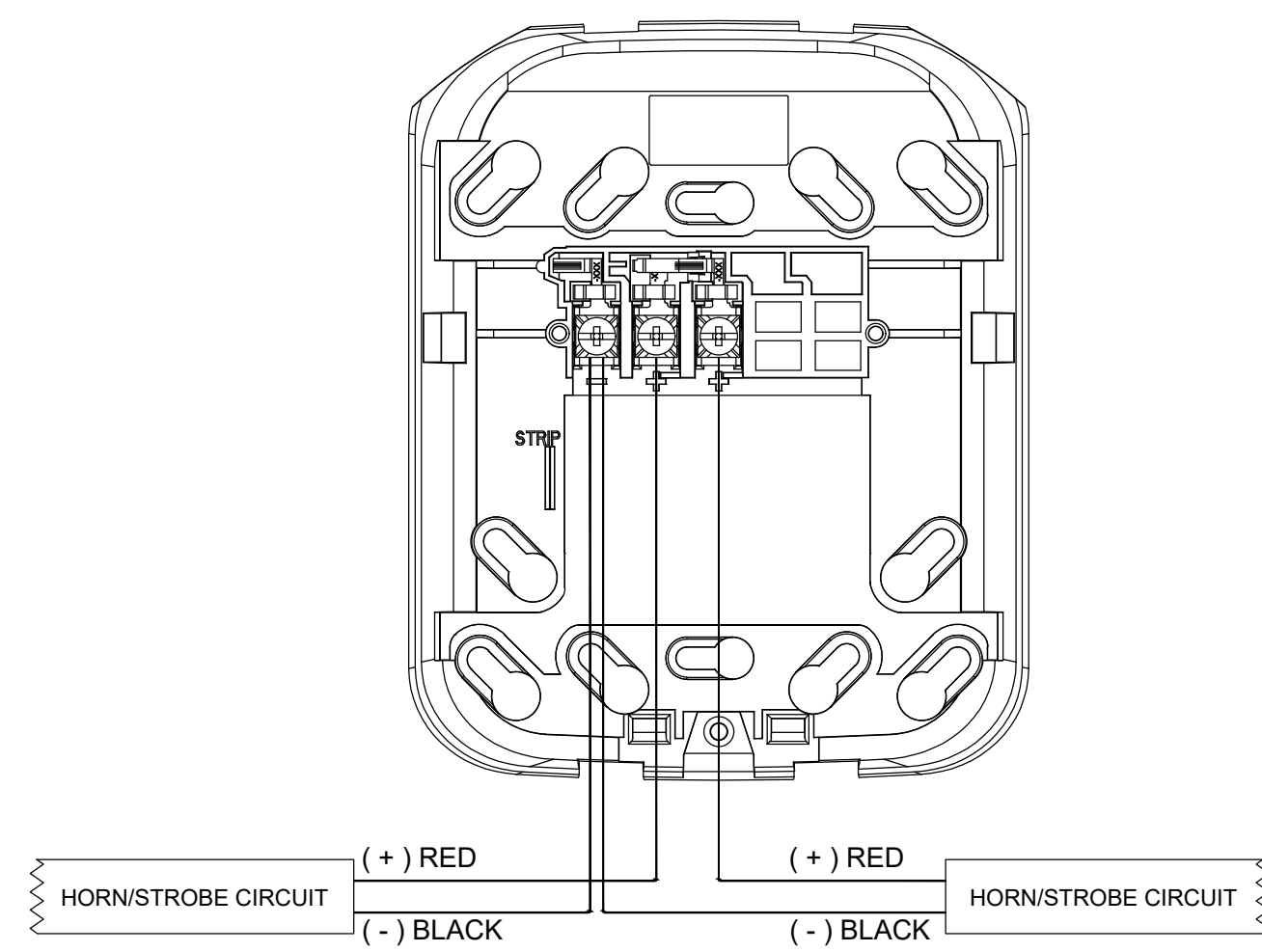
### PULL STATION



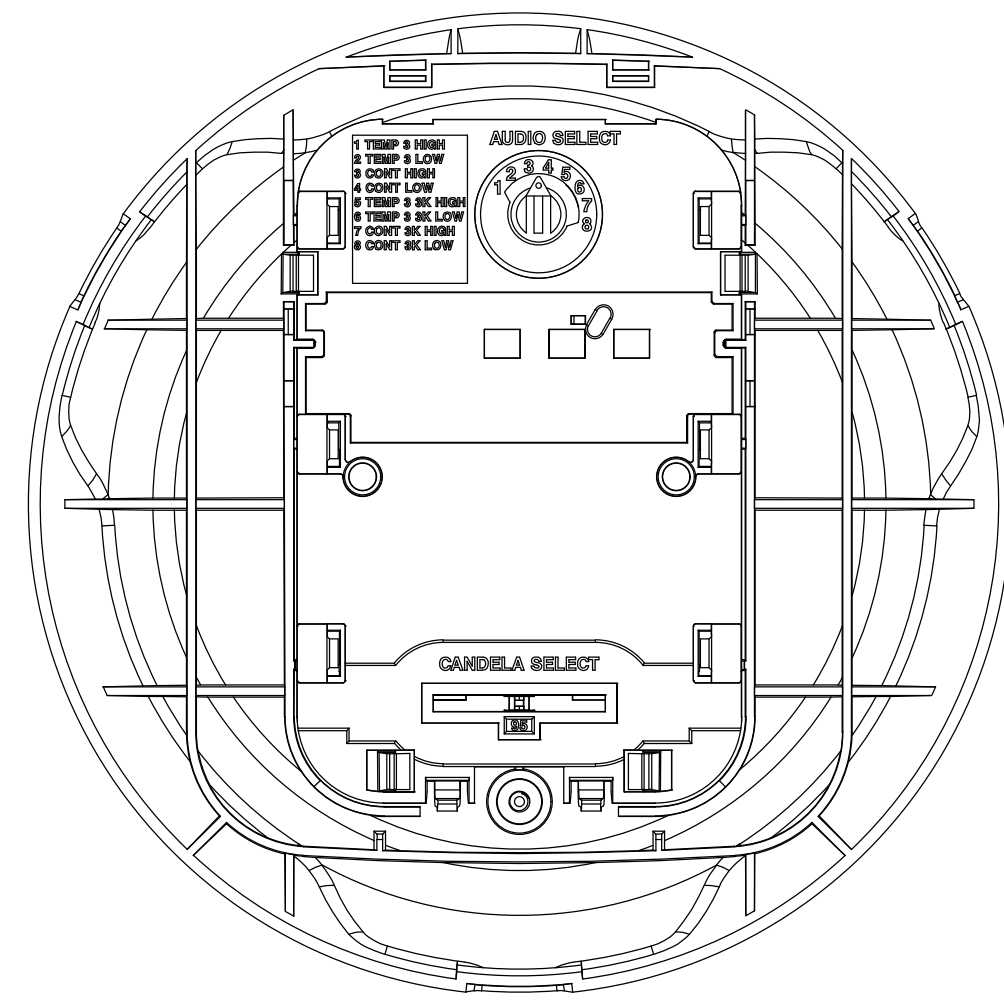
### SMOKE DETECTOR



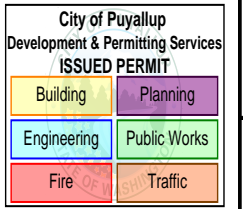
### HORN/STROBE



BACKPLATE



DEVICE



**BRADLEY HEIGHTS**  
BLDG C

27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
 (2026-05-08)  
 INITIAL SET

SHEET NUMBER: EF0.03

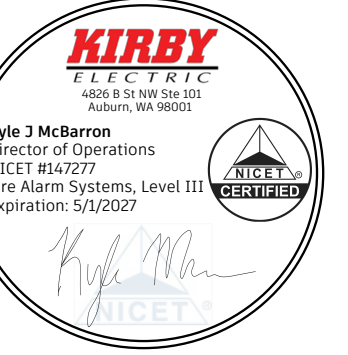
SHEET TITLE:  
 DEVICE DETAILS

PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

JOB NUMBER: 25-058

**KIRBY**  
 4825 15th St NW • Suite 101 • Auburn, WA 98001  
 P: (253) 859-2000 • F: (253) 859-2363  
 www.kirbyelectric.com



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

**BRADLEY HEIGHTS  
 BLDG C**

27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
 (2026-05-08)  
 INITIAL SET

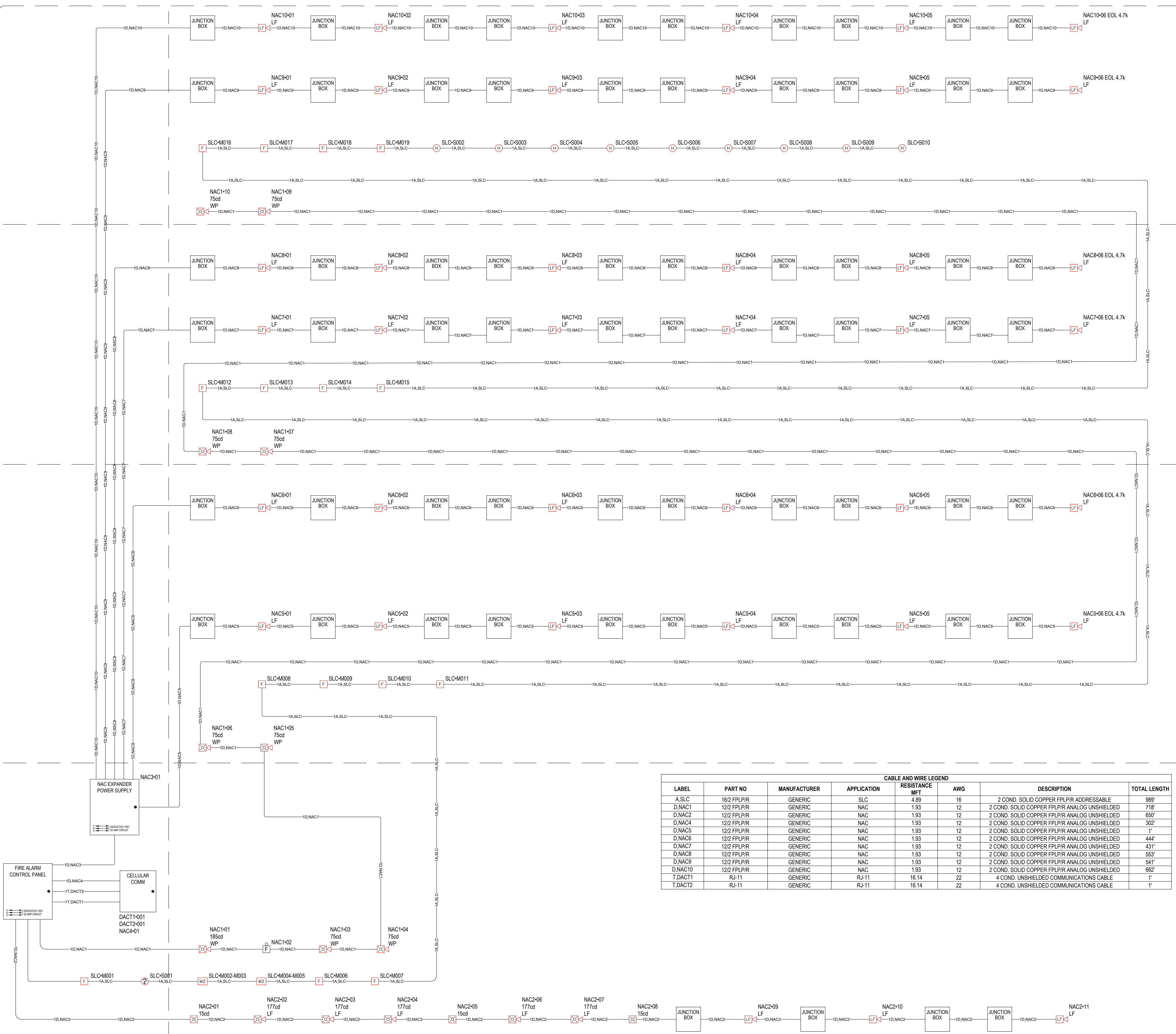
SHEET NUMBER: EF1.01

SHEET TITLE:  
**ONE-LINE  
 RISER DIAGRAM**

PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

JOB NUMBER: 25-058



**CABLE AND WIRE LEGEND**

LABEL	PART NO	MANUFACTURER	APPLICATION	RESISTANCE MFT	AWG	DESCRIPTION	TOTAL LENGTH
A.SLC	16/2 FPLPIR	GENERIC	SLC	4.89	16	2 COND. SOLID COPPER FPLPIR ADDRESSABLE	989'
D.NAC1	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	716'
D.NAC2	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	667'
D.NAC4	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	302'
D.NAC5	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	1'
D.NAC6	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	444'
D.NAC7	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	431'
D.NAC8	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	553'
D.NAC9	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	541'
D.NAC10	12/2 FPLPIR	GENERIC	NAC	1.93	12	2 COND. SOLID COPPER FPLPIR ANALOG UNSHIELDED	662'
T.DACT1	RJ-11	GENERIC	RJ-11	16.14	22	4 COND. UNSHIELDED COMMUNICATIONS CABLE	1'
T.DACT2	RJ-11	GENERIC	RJ-11	16.14	22	4 COND. UNSHIELDED COMMUNICATIONS CABLE	1'

**SLC POINTS LIST**

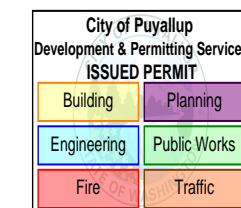
POINT #	DEVICE TYPE	DESCRIPTION
97.S001	SMOKE DETECTOR	SPRINKLER RISER ROOM - FACP & PS1
97.S002	HEAT DETECTOR	ATTIC - NORTHEAST
97.S003	HEAT DETECTOR	ATTIC - SOUTHEAST
97.S004	HEAT DETECTOR	ATTIC - SOUTH
97.S005	HEAT DETECTOR	ATTIC - SOUTH
97.S006	HEAT DETECTOR	ATTIC - SOUTH
97.S007	HEAT DETECTOR	ATTIC - SOUTHWEST
97.S008	HEAT DETECTOR	ATTIC - NORTHWEST
97.S009	HEAT DETECTOR	ATTIC - NORTH
97.S010	HEAT DETECTOR	ATTIC - NORTH

**MODULES**

POINT #	DEVICE TYPE	DESCRIPTION
97.M001	MANUAL PULL STATION	SPRINKLER RISER ROOM
97.M002	MANUAL PULL STATION	SPRINKLER RISER ROOM - RISER PROVISION SPARE
97.M003	DUAL INPUT MODULE	SPRINKLER RISER ROOM - RISER PROVISION SPARE
97.M004	DUAL INPUT MODULE	SPRINKLER RISER ROOM - RISER PROVISION SPARE
97.M005	DUAL INPUT MODULE	SPRINKLER RISER ROOM - RISER PROVISION SPARE
97.M006	MANUAL PULL STATION	BASEMENT - STAIR 2 - EAST
97.M007	MANUAL PULL STATION	BASEMENT - STAIR 2 - WEST
97.M008	MANUAL PULL STATION	LEVEL 1 - STAIR 2 - WEST
97.M009	MANUAL PULL STATION	LEVEL 1 - STAIR 2 - WEST
97.M010	MANUAL PULL STATION	LEVEL 1 - STAIR 2 - EAST
97.M011	MANUAL PULL STATION	LEVEL 1 - STAIR 2 - EAST
97.M012	MANUAL PULL STATION	LEVEL 2 - STAIR 2 - WEST
97.M013	MANUAL PULL STATION	LEVEL 2 - STAIR 2 - WEST
97.M014	MANUAL PULL STATION	LEVEL 2 - STAIR 2 - EAST
97.M015	MANUAL PULL STATION	LEVEL 2 - STAIR 2 - EAST
97.M016	MANUAL PULL STATION	LEVEL 3 - STAIR 2 - WEST
97.M017	MANUAL PULL STATION	LEVEL 3 - STAIR 2 - WEST
97.M018	MANUAL PULL STATION	LEVEL 3 - STAIR 2 - EAST
97.M019	MANUAL PULL STATION	LEVEL 3 - STAIR 2 - EAST

PANEL LOAD SUMMARY									STANDBY CURRENT (AMPS)		ALARM CURRENT (AMPS)		PANEL FACP (6808) SUMMARY REPORT			
PANEL COMPONENT SUMMARY				QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)						
6808 Main Board				1	6808 Main Board	Main Board	1 x 0.19	= 0.19	1 x 0.25	= 0.25						
CIRCUIT SUMMARY									STANDBY CURRENT		ALARM CURRENT		POINT-TO-POINT VOLTAGE DROP CALCULATION SUMMARY			
SOURCE	CIRCUIT	AWG	SYMBOL	QTY	PART NO	DEVICE SETTING	CIRCUIT LENGTH	CIRCUIT RESISTANCE (Ω/ft)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	STARTING CALCULATION VOLTAGE	END OF LINE VOLTAGE	VOLTAGE DROP	
6808 Main Board	NAC1	12		8	P2GRKLED	75cd	718'	0.00193	8 x 0	= 0	8 x 0.087	= 0.696	20.4v	19.22v	1.18v	
				1	P2GRKLED	185cd			1 x 0	= 0	1 x 0.19	= 0.19				
				1	SSM24-10				1 x 0	= 0	1 x 0.0535	= 0.0535				
	NAC2	12		3	HW-LF		300'	0.00193	3 x 0	= 0	3 x 0.166	= 0.498	20.4v	18.9v	1.5v	
				5	P2WH-LF	135cd			5 x 0	= 0	5 x 0.296	= 1.48				
				3	SWLED	15cd			3 x 0	= 0	3 x 0.018	= 0.054				
	NAC4	12			1	HW-AV-LTE-M		0'	0.00193	1 x 0.06	= 0.06	1 x 0.2	= 0.2	20.4v	20.4v	0v
	SLC	16		2	SK-MONITOR-2		841'	0.00489	2 x 0.00075	= 0.0015	2 x 0.00075	= 0.0015	20.4v	18.9v	1.5v	
				15	SK-PULL-DA				15 x 0.00035	= 0.00525	15 x 0.00035	= 0.00525				
				9	SS-HEAT w/B300-6				9 x 0.0002	= 0.0018	9 x 0.0045	= 0.0405				
				1	SS-PHOTO w/B300-6				1 x 0.0002	= 0.0002	1 x 0.0045	= 0.0045				
	SECONDARY POWER SOURCE REQUIREMENTS									REQUIRED STANDBY TIME = 24 HOURS		REQUIRED ALARM TIME = 5 MINUTES		PROVIDE (2) 12V 12AH BATTERIES @ 24VDC		
										0.25875	x 24	= 6.21 AH				
									3.47325	x 0.08	= 0.29 AH					
									STANDBY AND ALARM LOAD SUBTOTAL		6.5 AH					
									DERATING FACTOR		x 1.25					
SECONDARY LOAD REQUIREMENTS (AMP HOURS)											8.12 AH					

PANEL LOAD SUMMARY									STANDBY CURRENT (AMPS)		ALARM CURRENT (AMPS)		PANEL PS10 (HPF-PS10) SUMMARY REPORT PANEL POWER SUPPLY MAX CURRENT = 10A TOTAL USED CAPACITY = 6.161A (61.61 %)		
PANEL COMPONENT SUMMARY				QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)					
HPF-PS10 MAIN BOARD				1	HPF-PS10 MAIN BOARD	Fire Alarm Power Supply Main Board	1 x 0.156	= 0.156	1 x 0.185	= 0.185					
CIRCUIT SUMMARY									STANDBY CURRENT		ALARM CURRENT		POINT-TO-POINT VOLTAGE DROP CALCULATION SUMMARY		
SOURCE	CIRCUIT	AWG	SYMBOL	QTY	PART NO	DEVICE SETTING	CIRCUIT LENGTH	CIRCUIT RESISTANCE (Ω/ft)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	STARTING CALCULATION VOLTAGE	END OF LINE VOLTAGE	VOLTAGE DROP
HPF-PS10 MAIN BOARD	NAC10	12		6	HW-LF		645'	0.00193	6 x 0	= 0	6 x 0.166	= 0.996	20.4v	18.44v	1.96v
	NAC5	12		6	HW-LF		442'	0.00193	6 x 0	= 0	6 x 0.166	= 0.996	20.4v	19.27v	1.13v
	NAC6	12		6	HW-LF		427'	0.00193	6 x 0	= 0	6 x 0.166	= 0.996	20.4v	19.27v	1.13v
	NAC7	12		6	HW-LF		551'	0.00193	6 x 0	= 0	6 x 0.166	= 0.996	20.4v	18.85v	1.55v
	NAC8	12		6	HW-LF		536'	0.00193	6 x 0	= 0	6 x 0.166	= 0.996	20.4v	18.86v	1.54v
	NAC9	12		6	HW-LF		660'	0.00193	6 x 0	= 0	6 x 0.166	= 0.996	20.4v	18.43v	1.97v
SECONDARY POWER SOURCE REQUIREMENTS									REQUIRED STANDBY TIME = 24 HOURS		REQUIRED ALARM TIME = 5 MINUTES		PROVIDE (2) 12V 7AH BATTERIES @ 24VDC		
									0.156	x 24	= 3.74 AH				
									6.161	x 0.08	= 0.51 AH				
									STANDBY AND ALARM LOAD SUBTOTAL		4.26 AH				
									DERATING FACTOR		x 1.25				
SECONDARY LOAD REQUIREMENTS (AMP HOURS)											5.32 AH				



BRADLEY HEIGHTS  
 BLDG C  
 27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
 (2026-05-08)  
 INITIAL SET

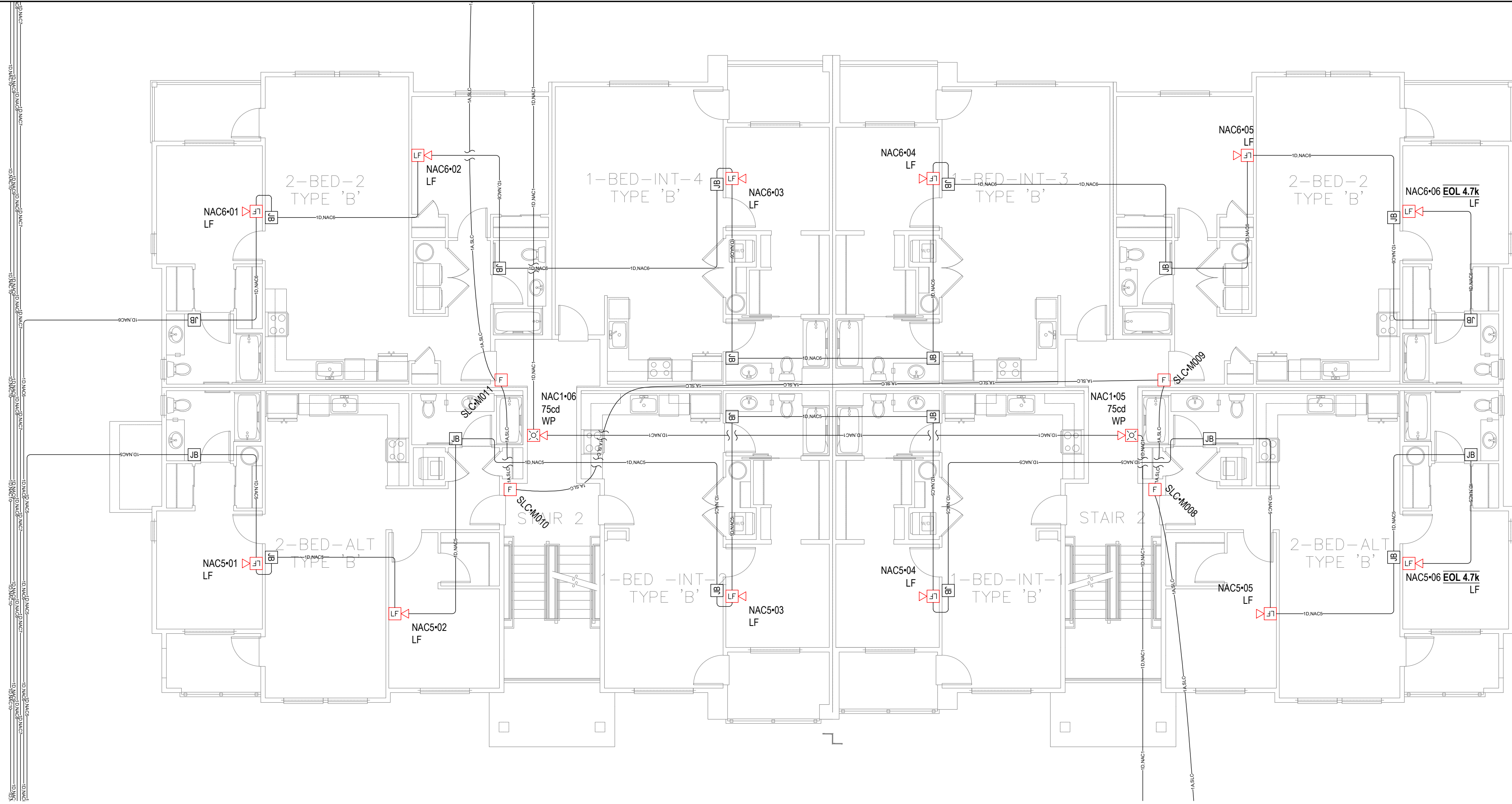
SHEET NUMBER: EF2.01

SHEET TITLE:  
 FIRE ALARM  
 PANEL  
 CALCULATIONS

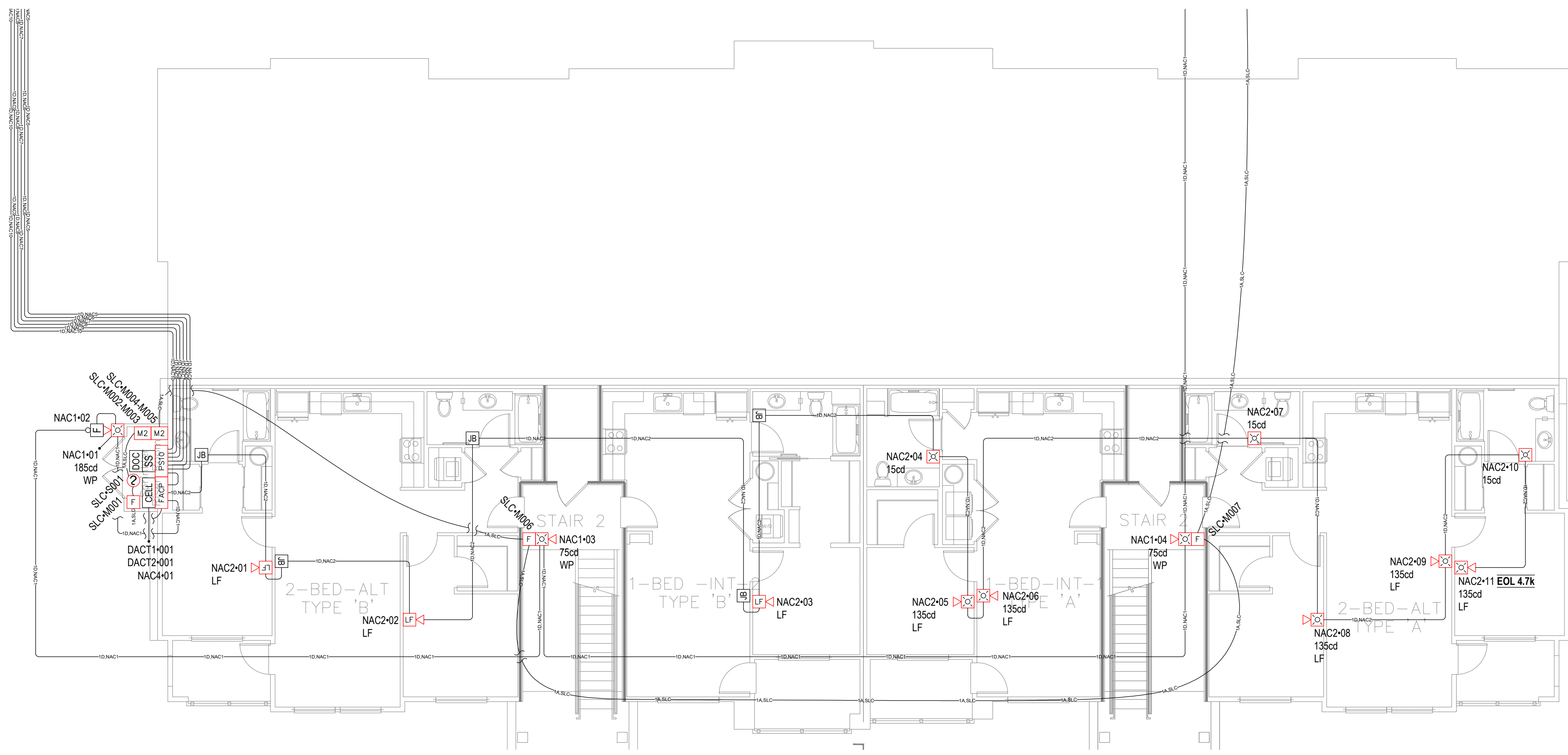
PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

JOB NUMBER: 25-058



1 LEVEL 1 FIRE ALARM PLAN  
SCALE: 1/8" = 1'-0"



1 BASEMENT FIRE ALARM PLAN  
SCALE: 1/8" = 1'-0"

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



BRADLEY HEIGHTS  
BLDG C

27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
A (2026-05-08)  
INITIAL SET

SHEET NUMBER: EF3.01

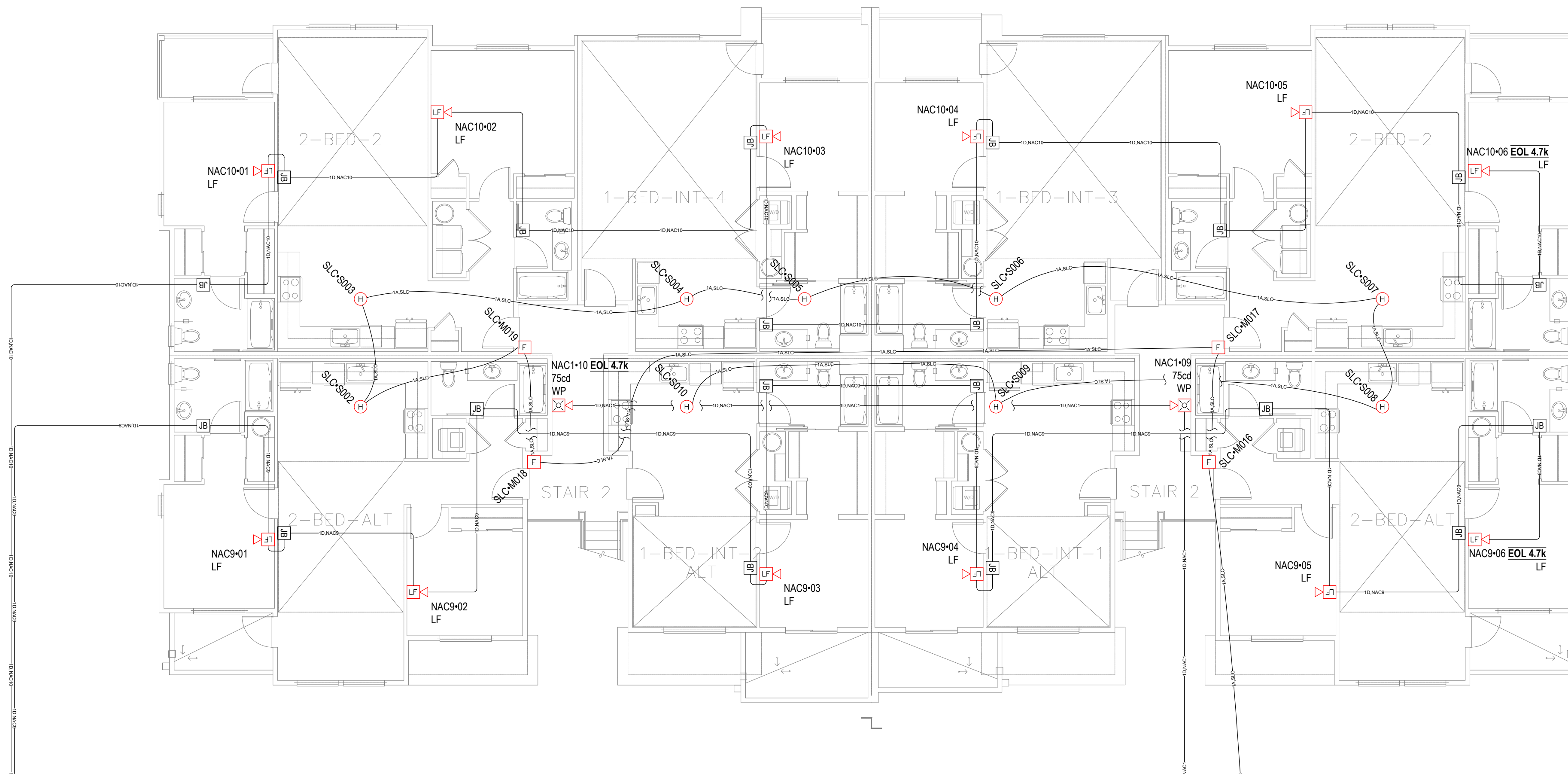
SHEET TITLE:  
BASEMENT &  
LEVEL 1 FIRE  
ALARM PLAN

PLOT DATE: 05-08-26

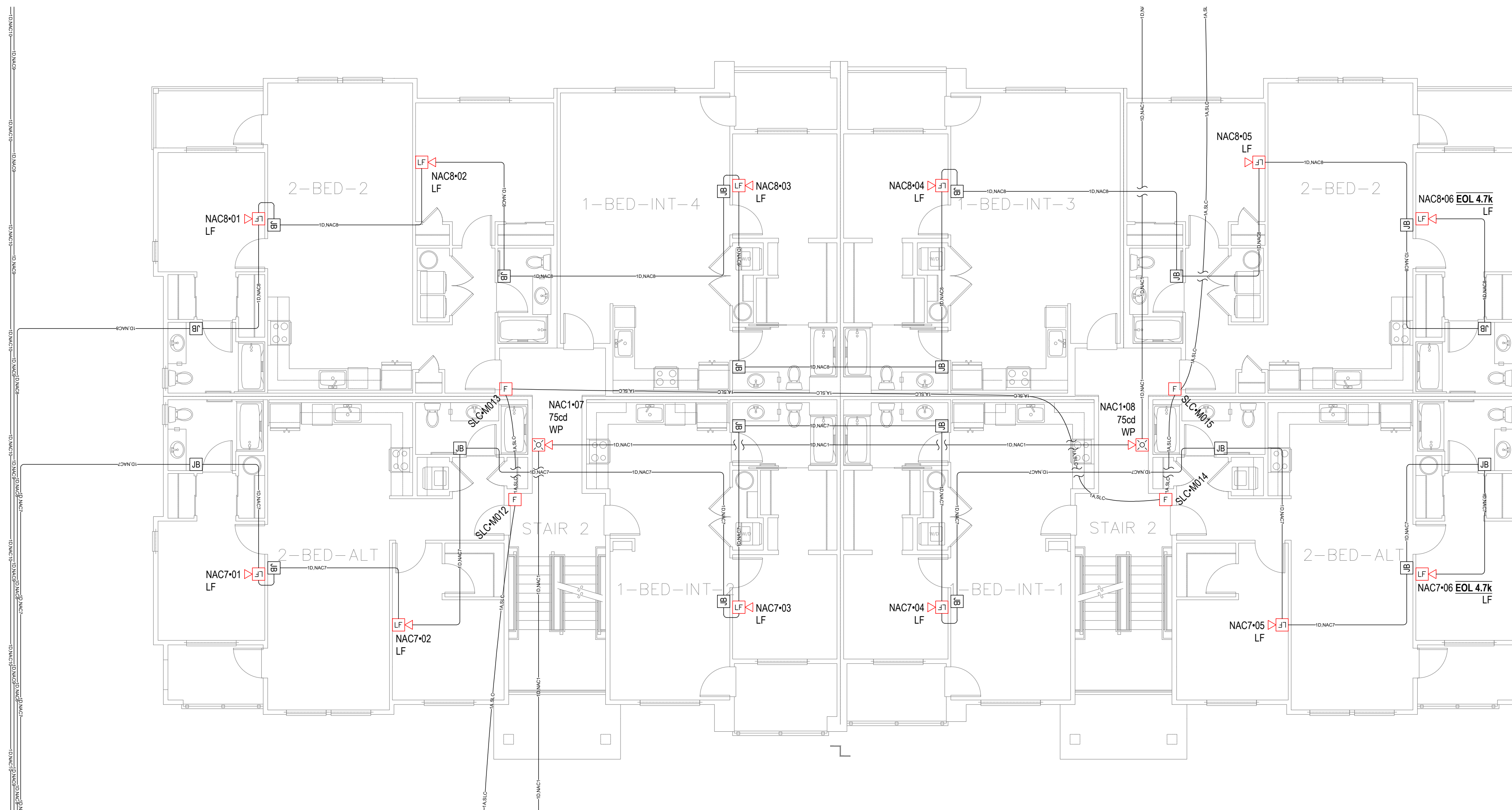
DESIGNED BY: D.S.K.

JOB NUMBER: 25-058

**KIRBY**  
4826 17th St NW • Suite 101 • Auburn, WA 98001  
P: (253) 859-2000 • F: (253) 859-2363  
www.kirbyelectric.com



1 LEVEL 3 FIRE ALARM PLAN  
SCALE: 1/8" = 1'-0"



1 LEVEL 2 FIRE ALARM PLAN  
SCALE: 1/8" = 1'-0"

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

KIRBY  
4826 7th St NW, Suite 101, Auburn, WA 98001  
P: (253) 859-2000 F: (253) 859-2363  
www.kirbyelectric.com

Kyle J McBarren  
Director of Operations  
NICET #147277  
Fire Alarm Systems, Level III  
Expiration 5/3/2027

BRADLEY HEIGHTS  
BLDG C  
27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:  
A (2026-05-08)  
INITIAL SET

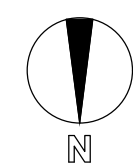
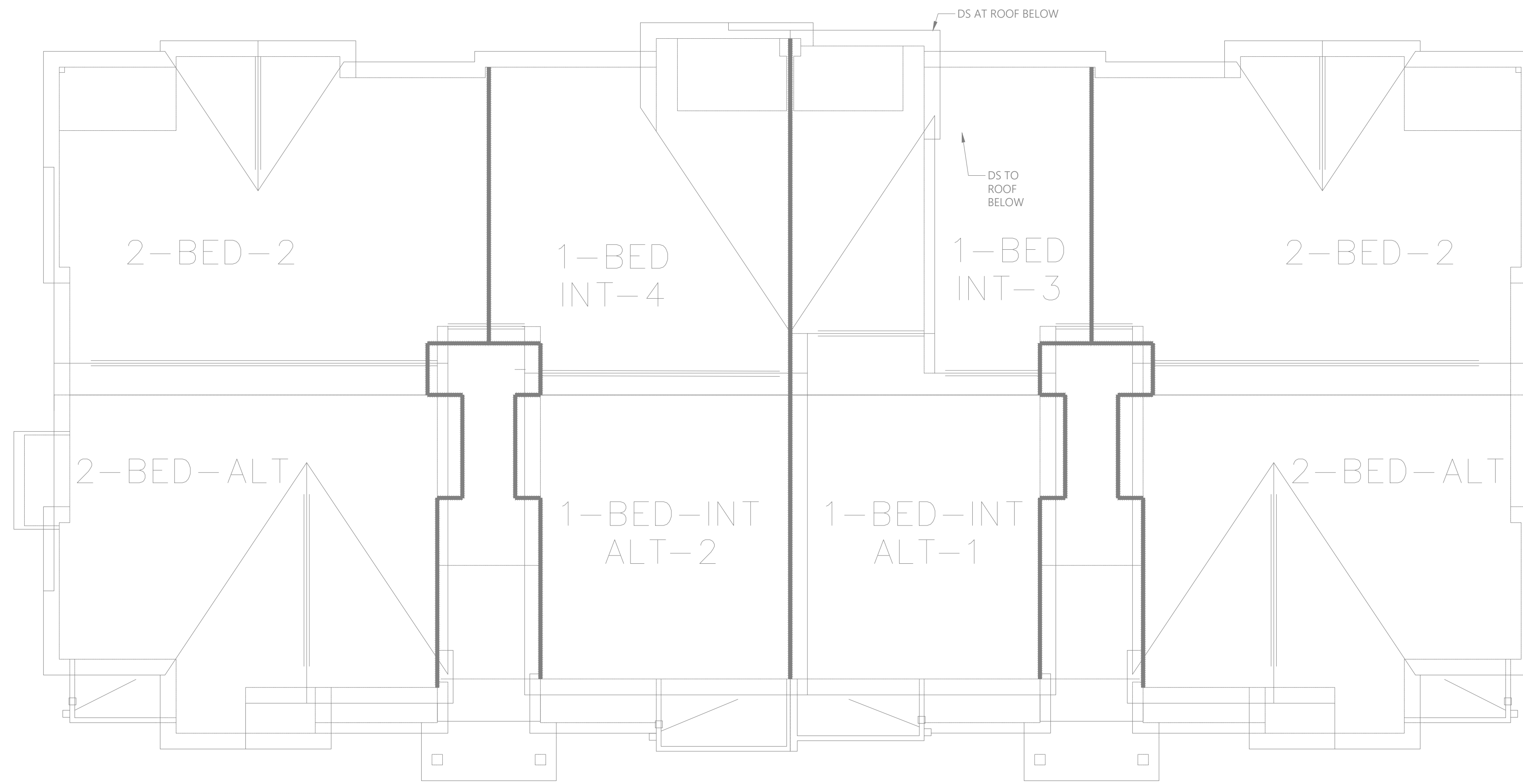
SHEET NUMBER: EF3.02

SHEET TITLE:  
LEVEL 2 & 3 FIRE ALARM PLAN

PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

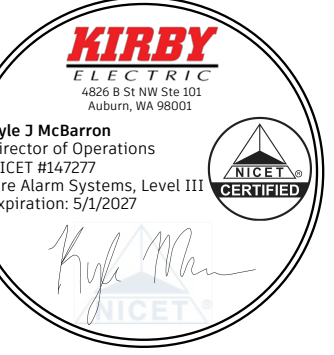
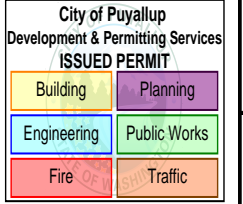
JOB NUMBER: 25-058



1

ROOF FIRE ALARM PLAN

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



BRADLEY HEIGHTS  
BLDG C

27TH AVE SE AND 5TH ST SE PUYALLUP, WA 98373

REVISIONS:

(2026-05-08)  
INITIAL SET

SHEET NUMBER: EF3.03

SHEET TITLE:  
ROOF FIRE  
ALARM PLAN

PLOT DATE: 05-08-26

DESIGNED BY: D.S.K.

JOB NUMBER: 25-058

**KIRBY**  
ELECTRIC  
4826 75<sup>th</sup> St, NW • Suite 101 • Auburn, WA 98001  
P: (253) 859-2000 • F: (253) 859-2363  
www.kirbyelectric.com