

1. SYSTEM WIRING NOTED ON THE DRAWINGS IS PER MANUFACTURE AND CODE REQUIREMENTS. ANY ALTERATION TO SYSTEM WIRING, WITHOUT APPROVAL, IS AT ELECTRICAL CONTRACTOR'S OWN RISK!!

3. WIRE SHOWN IN THIS DRAWING SET IS PERMITTED IN RACEWAYS LEADING TO FIRE PROTECTION EQUIPMENT. OTHER WIRE SHALL NOT BE PERMITTED IN THE SAME RACEWAY.

5. WHEN NECESSARY, DUE TO CHANGING DESIGN REQUIREMENTS, FACTORY AVAILABILITY, ETC. FIRE SYSTEMS WEST RESERVES THE RIGHT TO SUBSTITUTE EQUIPMENT HEREIN MENTIONED OR SPECIFIED, WITH

7. FIRE SYSTEMS WEST WILL INSTALL A NEW FIRE ALARM CONTROL PANEL, COMMUNICATOR, AND POWER SUPPLY.

ANNUNCIATOR.

9. FIRE SYSTEMS WEST WILL INSTALL NEW BEAM SMOKE DETECTORS.

10. FIRE SYSTEMS WEST WILL INSTALL NEW MANUAL PULL STATIONS AT EACH EXTERIOR EXIT.

12. FIRE SYSTEMS WEST WILL INSTALL NEW INPUT MODULES TO MONITOR THE DUCT SMOKE DETECTORS.

13. FIRE SYSTEMS WEST WILL INSTALL NEW RELAY MODULES FOR HVAC SHUTDOWN.

14. FIRE SYSTEMS WEST WILL INSTALL A NEW INTERIOR NOTIFICATION DEVICE IN EACH SHELL SPACE.

1. INSTALL NEW ADDRESSABLE INPUT MODULES TO MONITOR SPRINKLER RISER WATERFLOWS, TAMPERS, AND ANY PIVS AND VAULT TAMPERS. COORDINATE WITH THE SPRINKLER CONTRACTOR.

2. INSTALL NEW ADDRESSABLE INPUT MODULES TO MONITOR THE FIRE PUMP ENGINE AND TAMPERS.

BEAM SMOKE DETECTORS. MONITOR EACH BEAM SMOKE DETECTOR WITH AN ADDRESSABLE INPUT MODULE. TIE EACH BEAM SMOKE DETECTOR INTO A REMOTE TEST SWITCH.

[illegible]

Circuit Calculations

Panel: P2 Card: 06

Terminal Voltage: 20.4V/DC Amperage: 3.0000A

Cable: 14/2 SOL JKT FPLR 1M RL RED #14

Calculations based on Lump Sum Length:

Design Criteria Ambient temperature: 167°F Max. operating voltage drop: 10%:

Circuit	Description	Type	Total Len	P2Rk, 110CD, 221.00mA	EOL-4.7	Total Amps	Gauge	V Drop %	V Drop	Resistance	Max Len
NAC1		Notification	26-1	1	1	221.000mA	#14	0.17	0.0354V	0.2 Ohms	1503'-0

Circuit Calculations				Panel: P2 Card: 06							
Terminal Voltage: 20.4V/DC Amperage: 3.0000A											
Cable: 14/2 SOL JKT FPLR 1M RL RED #14											
Calculated based on Lump Sum Length:											
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%											
NAC3	Description	Type	Total	PC2RL, 150CD, 229.000mA	EOL-4.7	Total Amps	Gauge	V Drop	V Drop	Resistance	Max Len
		Notification	173-10	1	1	229.0000mA	#14	1.20	0.2444V	1.1 Ohms	1450'-0"

Circuit Calculations

Panel: P2 Card: 06

Terminal Voltage: 20.4V/DC Amperage: 3.0000A

Cable: 14/2 SOL JKT FPLR 1M RL RED #14

Calculations based on Lump Sum Length.

Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 10%

Circuit	Description	Type	Total Len	OSI-10, 8.000mA	OSE-SP-01, 0.800mA	EOLR-1, 20.000mA	Total Amps	Gauge	V Drop %	V Drop	Resistance	Max
AUX7		Power/Resettable	402'-9"	3	3	1	46.4000mA	#14	0.56	0.1146V	2.5 Ohms	70

Matt Carlman
NICET Certification No. 146053
Fire Alarm Systems – Level III
Certification Expires: 11/01/2026

Diagram illustrating the SYSTEM INPUTS and SYSTEM OUTPUTS for the Fire Alarm Control Panel (FACP).

SYSTEM INPUTS:

- 1 Manual Fire Alarm Boxes
- 2 Smoke Detectors/ Beam Detectors
- 3 IN-Duct Smoke Detectors
- 4 Waterflow
- 5 Sprinkler Control Valve
- 6 Fire Alarm AC Power Failure
- 7 Fire Alarm System Low Battery
- 8 Open Circuit
- 9 Ground Fault
- 10 Notification Appliance Circuit Short

SYSTEM OUTPUTS:

- Activate Common Alarm Signal Indicator
- Activate Audible Alarm Signal
- Activate Common Supervisory Signal
- Activate Audible Supervisory Signal
- Activate Common Trouble Signal
- Activate Audible Common Trouble Signal
- Activate Alarm Indicator
- HVLS Fan Shutdown
- Transmit Evacuation Signals
- Transmit Fire Alarm Signal
- Transmit Supervisory Signal to Supervising Station
- Transmit Trouble Signal to Supervising Station
- Activate Exterior Strobe at FD Response Point

The diagram shows the connections between the inputs and outputs, with black dots indicating active connections. For example, Manual Fire Alarm Boxes (1) connect to Activate Common Alarm Signal Indicator, Activate Audible Alarm Signal, and Activate Common Supervisory Signal. Smoke Detectors/ Beam Detectors (2) connect to Activate Common Supervisory Signal, Activate Audible Supervisory Signal, and Activate Common Trouble Signal. IN-Duct Smoke Detectors (3) connect to Activate Common Trouble Signal and Activate Audible Common Trouble Signal. Waterflow (4) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator. Sprinkler Control Valve (5) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator. Fire Alarm AC Power Failure (6) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator. Fire Alarm System Low Battery (7) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator. Open Circuit (8) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator. Ground Fault (9) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator. Notification Appliance Circuit Short (10) connects to Activate Alarm Indicator and Activate Audible Alarm Indicator.

OPERATIONAL MATRIX


Compensation Factors - Standby: 1.2 Alarm: 1.2 Requirement with compensation: 8.866Ah

P		L-SERIES 2-WIRE, HORN STROBE, RED, CEILING	SYSTEM SENSOR	PC2RL	2
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Circuit Calculations Panel: P1 Card: 00

City of Puyallup
Fire
**REVIEWED FOR
COMPLIANCE**

DDrake
10/03/2024
1:22:56 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 the 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.



FILE:Boot Barn E1.cad DATE:09/16/24 TIME:10:49:21 —

A	14/2 FPLP
B	16/2 FPLP
EX	EXISTING LOCATION
D	DEMO DEVICE
N	NEW DEVICE
R	RELOCATE

CODE COMPLIANCE		
OCCUPANT TYPE:	M	CITY OF PUYALLUP MUNICIPAL CODE
OCCUPANT LOAD:	194	2021 INTERNATIONAL BUILDING CODE
AREA:	13,171 SF	2021 INTERNATIONAL FIRE CODE
CONSTRUCTION:		2023 NATIONAL ELECTRICAL CODE
SPRINKLERED:	YES	2022 NATIONAL FIRE ALARM & SIGNALING CODE

REVISIONS				
NO.	DESCRIPTION	DATE	BY	CHK
1	ISSUED_FOR_REVIEW	09/11/2024	CO	MWG

1. SYSTEM WIRING NOTED ON THE DRAWINGS IS PER MANUFACTURE AND CODE REQUIREMENTS. ANY ALTERATION TO SYSTEM WIRING, WITHOUT APPROVAL, IS AT ELECTRICAL CONTRACTOR'S OWN RISK!!

2. SYSTEM WIRING SHOWN ON DRAWINGS IS DIAGRAMMATIC AND ONLY USED FOR REFERENCE PURPOSES. ACTUAL WIRE AND DEVICE INSTALLATION MAY VARY DUE TO OBSTRUCTIONS.

3. WIRE SHOWN IN THIS DRAWING SET IS PERMITTED IN RACEWAYS LEADING TO FIRE PROTECTION EQUIPMENT. OTHER WIRE SHALL NOT BE PERMITTED IN THE SAME RACEWAY.

4. FIRE ALARM SYSTEM INSTALLATION SHALL CONFORM WITH THE LATEST U.L., N.E.C., N.F.P.A., W.A.C., AND OTHER STANDARDS AS APPLICABLE TO THE CITY STANDARDS.

5. WHEN NECESSARY, DUE TO CHANGING DESIGN REQUIREMENTS, FACTORY AVAILABILITY, ETC. FIRE SYSTEMS WEST RESERVES THE RIGHT TO SUBSTITUTE EQUIPMENT HEREIN MENTIONED OR SPECIFIED, WITH EQUIPMENT OF EQUAL OR BETTER QUALITY, FUNCTION AND DESIGN.

6. PARALLEL BRANCHING (T-TAPPING) OF WIRE TO ALL NOTIFICATION APPLIANCE CIRCUITS SHALL NOT BE PERMITTED.

7. FIRE SYSTEMS WEST WILL INSTALL A NEW FIRE ALARM CONTROL PANEL, COMMUNICATOR, AND POWER SUPPLY.

8. FIRE SYSTEMS WEST WILL INSTALL A NEW REMOTE FIRE ALARM ANNUNCIATOR.

9. FIRE SYSTEMS WEST WILL INSTALL NEW BEAM SMOKE DETECTORS.

10. FIRE SYSTEMS WEST WILL INSTALL NEW MANUAL PULL STATIONS AT EACH EXTERIOR EXIT.

11. FIRE SYSTEMS WEST WILL INSTALL NEW INPUT MODULES TO MONITOR THE SPRINKLER RISER SYSTEM AND THE FIRE PUMP.

12. FIRE SYSTEMS WEST WILL INSTALL NEW INPUT MODULES TO MONITOR THE DUCT SMOKE DETECTORS.

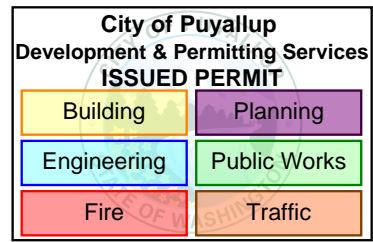
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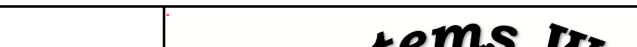

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2. INSTALL NEW ADDRESSABLE INPUT MODULES TO MONITOR THE FIRE PUMP ENGINE AND TAMPERS.

3. USE AUXILIARY POWER CIRCUIT FROM THE POWER SUPPLY TO POWER BEAM SMOKE DETECTORS. MONITOR EACH BEAM SMOKE DETECTOR WITH AN ADDRESSABLE INPUT MODULE. TIE EACH BEAM SMOKE DETECTOR INTO A REMOTE TEST SWITCH.



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

PROJECT: 817-1479		BOOT BARN - FIRE ALARM PLAN		A B EX D N R	14/2 FPLP 16/2 FPLP EXISTING LOCATION DEMO DEVICE NEW DEVICE RELOCATE	CODE COMPLIANCE			DESIGNER	REVISIONS					<div><div>206 Frontage Rd. North #C Pacific, WA 98047</div><div>f:(253) 735-0113 t:(253) 833-1248</div><div>WA ECL# FIRESWT 055LW WA CL# FIRESWT 140B1</div></div>	
DATE: 09/11/2024	CONTRACT NAME: Boot Barn 4102 S Meridian Puyallup, WA 98373	CONTRACT WITH: Powell RYKA 2625 Northup Way Bellevue, WA 98004				OCCUPANT TYPE:	M	CITY OF PUYALLUP MUNICIPAL CODE	CAMRYN OLIVAREZ NICET FAS-II, #153071	NO.	DESCRIPTION	DATE	BY	CHK		
SCALE: 1/8"=1'-0"						OCCUPANT LOAD:	194	2021 INTERNATIONAL BUILDING CODE	FIRE SYSTEMS WEST, INC 206 FRONTAGE ROAD NORTH #C PACIFIC, WASHINGTON 98047	1	ISSUED_FOR_REVIEW	09/11/2024	CO	MWC		
SHEET: FA-02	ON-SITE CONTACT: Chris Meier / 425-828-4774 / cmeier@powellryka.com					AREA:	13,171 SF	2021 INTERNATIONAL FIRE CODE								
						CONSTRUCTION:		2023 NATIONAL ELECTRICAL CODE								
						SPRINKLERED:	YES	2022 NATIONAL FIRE ALARM & SIGNALING CODE	x							
-- FILE: Boot Barn E1.cad DATE: 09/16/24 TIME: 10:52:05 --				STROBE COVERAGE AREA SHALL BE DEFINED AS: 10 FT. CLG. HT. 20 FT. CLG. HT. 30 FT. CLG. HT. 15 cd = 20x20' 30 cd = 20x20' 75 cd = 20x20' 30 cd = 30x30' 75 cd = 40x40' 110 cd = 30x30' 75 cd = 40x40' 95 cd = 40x40' 110 cd = 40x40' 95 cd = 50x50' 110 cd = 50x50' 115 cd = 50x50'												