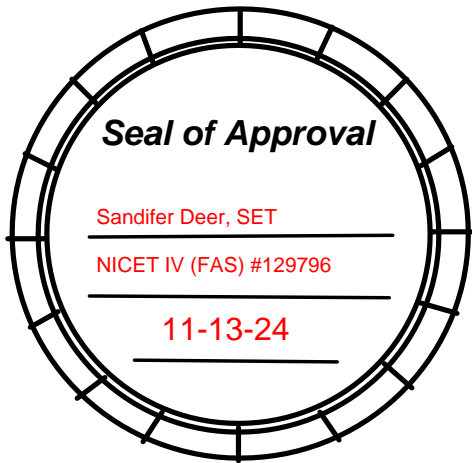


DESIGNED BY:
SANDIFER DEER
NICET IV #129796



SCOPE OF WORK

INSTALL ADDITIONAL OF DEVICES ON SILENT KNIGHT 5208
CONVENTIONAL FIRE ALARM PANEL IN GROUP E PORTABLES.
PROVIDE FIRE ALARM VISUAL AND AUDIBLE NOTIFICATION EACH
PORTABLE AND ON EXTERIOR. PROVIDE BELOW CEILING SMOKE
DETECTION AND ABOVE CEILING HEAT DETECTION IN EACH
PORTABLE.

DESIGNED IN ACCORDANCE WITH:
NFPA 72
NFPA 70
PUYALLUP MUNICIPAL FIRE CODE

INSTALLATION NOTES:

- PRIOR TO CALLING FOR INSPECTION, THE INSTALLER SHALL PROVIDE DOCUMENTATION TO THE LOCAL AHJ STATING THAT THE SYSTEM HAS BEEN INSTALLED, TESTED, EVALUATED AND CONFIRMED TO BE IN ACCORDANCE WITH ALL GOVERNING CODES AND THE APPROVED PLANS. THE FIRE ALARM INSTALLER SYSTEM INSTALLER SHALL COMPLETE AN NFPA 72 RECORD OF COMPLETION (NFPA 72 10.18.2.1). THE RECORD OF COMPLETION SHALL BE PROVIDED TO THE AHJ INSPECTOR AT THE TIME OF THE INSPECTION (NFPA 72 10.18.2.1.2.4).
- 2) INSTRUCTIONS FOR OPERATING, TESTING, AND MAINTENANCE OF THE SYSTEM ALONG WITH RECORD DRAWINGS OTHERWISE REFERRED TO "AS-BUILTS" AND EQUIPMENT SPECIFICATIONS SHALL BE PROVIDED AT AN APPROVED LOCATION.
- 3) ALL SYSTEMS AND DEVICES SHALL BE INSTALLED AND TESTED PER THE MANUFACTURE'S LISTING AND THE AUTHORITY HAVE JURISDICTION (NFPA 72 10.14.2.1). LABEL ALL DEVICE LOCATIONS.
- 4) FACP AND ALL REMOTE POWER SUPPLIES REQUIRE A DEDICATED 120VAV - 20AMP CIRCUIT. A NOTICE PLACED IN THE FACP SHALL DIRECT PERSONNEL TO THE LOCATION OF THE ELECTRICAL PANEL THAT IS SUPPLYING DEDICATED POWER TO THE SYSTEM (NFPA 72 10.5.5.1). THE DEDICATED CIRCUIT BREAKER THAT SERVES THE FIRE ALARM SYSTEM SHALL BE LABELED AND SECURED AGAINST TAMPERING WITH A RED BREAKER LOCKOUT.
- 5) WALL MOUNTED STROBES SHALL BE PLACED 80" MINIMUM TO 96" MAXIMUM ABOVE FLOOR LEVEL (NFPA 72 18.5.4.1 & 2). WALL MOUNTED STROBES SHALL BE SIZED IN ACCORDANCE WITH (NFPA 72 TABLE 18.5.4.3.1(A). CEILING MOUNTED STROBES SHALL BE PLACED AND SIZED IN ACCORDANCE WITH (NFPA 72 TABLE 18.5.4.3.1(B)).
- 6) WHEN MORE THAN TWO NOTIFICATION APPLIANCES ARE VISIBLE AT THE SAME TIME IN THE SAME ROOM OR ADJACENT SPACE OR THE FIELD OF VIEW THE FLASH OF THE STROBES SHALL BE SYNCHRONIZED (NFPA 72 18.5.4.3. (3) AND (4)).
- 7) PULL STATIONS SHALL BE PLACED BETWEEN 42 AND 48 INCHES ABOVE FLOOR LEVEL. DEVICES SHALL BE RED IN COLOR (ICC A117.1 309 AND NFPA 72 17.14.5).
- 8) CENTER SMOKE DETECTORS IN CORRIDORS BY CEILING LIGHTING AND THE FA STROBES. SMOKE DETECTORS IN CORRIDORS ARE TO BE SPACED PER NFPA 72 17.6.3.1. (H) AND 17.7.3.2.4.2 (4).
- 9) SMOKE DETECTORS USED FOR ELEVATOR RECALL SHALL BE INSTALLED WITHIN 21' OF THE ELEVATOR DOOR CENTERLINE (NFPA 72 21.3.5).
- 10) SMOKE DETECTORS USED FOR DOOR RELEASE SHALL BE INSTALLED WITHIN 5' OF THE DOOR ON THE CENTERLINE OF THE DOORWAY (NFPA 72 17.7.5.6.6.1).
- 11) AUDIBILITY REQUIREMENTS: A SOUND LEVEL OF 75dba or 15dba OVER AMBIENT SHALL BE REACHED IN ALL AREAS PROVIDED WITH FIRE ALARM DEVICES PER SPECIFICATION AND NFPA-72.
- 12) SET STROBE CANDELA OUTPUT AS SHOWN ON PLANS. SET HORN TO MED SETTING.
- 13) OUTDOOR STROBES REQUIRED FOR APPROACHING EMERGENCY VEHICLES TO BE LOCATED ON THE BUILDING AT A SERVICEABLE HEIGHT, AND TO BE CLEARLY VISIBLE FROM THE EMERGENCY VEHICLE APPROACH PATH.
- 14) FIRE ALARM CIRCUITS TO BE INSTALLED, SECURED, AND TERMINATED IN ACCORDANCE WITH NEC, NFPA 72, AND LOCAL AHJ REQUIREMENTS AND STANDARDS.
- 15) NOTIFY E-SQUARED SYSTEMS OF ANY DESIGN QUESTIONS OR CHANGES PRIOR TO INSTALLATION OR FABRICATION. COMPARE DRAWINGS WITH CURRENT CONTRACT DRAWINGS PRIOR TO INSTALLATION.
- 16) ANY ALTERATIONS OR VARIATIONS FROM THE DRAWINGS SHOULD BE APPROVED PRIOR TO PROCEEDING AND DOCUMENTED ON THE AS-BUILT DRAWINGS. VERIFY DEVICE LOCATIONS PRIOR TO INSTALLATION.
- 17) REFERENCE FACTORY INSTRUCTION MANUALS CURING INSTALLATION OF FIRE CONTROL EQUIPMENT.
- 18) DETECTORS SHALL NOT BE MOUNTED IN A DIRECT AIR STREAM. DO NOT INSTALL DETECTORS WITH IN 3'-0" OF AIR DIFFUSERS.
- 19) US ONLY U.L. LISTED DEVICES.
- 20) DO NOT INSTALL DETECTOR HEADS UNTIL FINAL CLEANING HAS BEEN PERFORMED.
- 21) FIELD DETERMINE INTERFACE REQUIREMENTS AND LOCATIONS OF EQUIPMENT SUPPLIED BY OTHER TRADES. (I.E. SPRINKLER DEVICES, HVAC UNITS, FIRE DAMPERS, ELEVATOR CONTROLS, & FAN CONTROLS.)
- 22) NOTIFY E-SQUARED A MIN. OF 1 WEEK PRIOR TO THE INSTALLATION OF ALL WIRING, DEVICES, AND POWER. FOR SCHEDULING OF SYSTEM CHECK OUT AND PROGRAMMING. E-SQUARED REQUIRES A MIN. OF 2 DAYS ON SITE FOR CHECKS PRIOR TO SCHEDULING A FIRE ALARM FINAL. LARGER SYSTEMS WILL REQUIRE MORE TIME. FAILURE TO HAVE WORK COMPLETED WILL REQUIRE RESCHEDULING AND ADDITIONAL COSTS.


ELECTRICAL NOTES:

- 2) INSTALLATION SHALL COMPLY WITH NFPA 70, PARTICULARLY ARTICLE 760, AND SHALL ALSO COMPLY WITH NFPA 72, AND ALL LOCAL ELECTRICAL CODES AND LOCAL JURISDICTION REQUIREMENTS.
- 3) CONDUIT INDICATED ON PRINTS IS DIAGRAMMATIC AND MAY BE REROUTED PER FIELD REQUIREMENTS.
- 4) AC POWER SHALL NOT OCCUPY THE SAME CONDUIT AS FIRE PROTECTION CIRCUITS (MOST FIRE DETECTION CKT'S ARE NEC CLASS 3)
- 5) ALL SLC LOOP WIRING SHALL BE MINIMUM 2 CONDUCTOR #16, UNSHEATHED, LOW/MID CAPACITANCE FIRE ALARM CABLE OF THE PROPER RISER RATING AND/OR PLENUM TYPE. SEE WIRE LEGEND FOR PROJECT SPECIFIC TYPE/GAUGE.
- 6) CONVENTIONAL FIRE DETECTION INITIATING DEVICE CIRCUITS OR NOTIFICATION APPLIANCE CIRCUITS SHALL NOT BE PARALLEL BRANCHED (TEE TAPPED) TO ENSURE SUPERVISION OF WIRING. ADDRESSABLE CLASS "A" FIRE DETECTION SIGNALING LINE CIRCUITS (SLC) SHALL NOT BE PARALLEL BRANCHED (TEE TAPPED) TO ENSURE SUPERVISION OF WIRING.
- 7) OBSERVE POLARITY OF THE FIRE DETECTION WIRING. POLARITY SHALL BE MAINTAINED THROUGHOUT ENTIRE SYSTEM; WIRE SHALL BE MARKED AND IDENTIFIED WHERE SPLICED, AND AT ANY JUNCTION BOXES.
- 8) THE FIRE ALARM PANEL GROUP SHALL BE A SEPARATE CONTINUOUS GROUND WIRE BACK TO THE SOURCE GROUND; CONDUIT GROUND IS NOT ACCEPTABLE PER MANUFACTURER'S SPECIFICATIONS.
- 9) ALL FIELD WIRING SHALL BE CHECKED FOR SHORTS, GROUNDS, & PROPER END OF LINE RESISTOR (ELR) VALUES BEFORE SCHEDULING E- SQUARED FOR SYSTEM CHECK OUT. DOCUMENT CIRCUIT READINGS AND PRESENT TO E-SQUARED TECHNICIAN UPON INITIAL ARRIVAL ON SITE. PROVIDE E-SQUARED A MIN. OF 1 WEEK NOTICE PRIOR TO CHECK OUT.
- 10) FIRE ALARM PANEL, AND ANY OTHER FIRE DETECTION EQUIPMENT REQUIRING 120V-AC, SHALL BE SUPPLIED BY A DEDICATED CIRCUIT BREAKER (OTHER THAN FIRE DETECTION) EQUIPMENT SHALL NOT SHARE THE FIRE ALARM CIRCUIT(S). THIS BREAKER SHALL BE PROVIDED WITH A BREAKER LOCK-OUT FOR ALL FIRE ALARM EQUIPMENT AND MARKED "FIRE ALARM CIRCUIT CONTROL". 120VAC POWER BY OTHERS.
- 11) POWER SHALL NOT BE APPLIED TO THE FIRE ALARM PANEL UNLESS A REPRESENTATIVE FROM E-SQUARED IS PRESENT.
- 12) FIRE NUTS ARE NOT ALLOWED. ALL SPLICES ARE TO BE TERMINATED ON TERMINAL STRIPS. (APPLICABLE TO MILITARY INSTALLATIONS ONLY)
- 13) ALL SLC, NOTIFICATION, AND SPEAKER WIRING SHALL BE STYLE 6 (CLASS A). NO OUTPUT CIRCUITS, FROM FCP, OR RETURN CIRCUITS SHALL BE RUN IN THE SAME CONDUIT. VERTICAL SEPARATION OF CONDUITS SHALL BE AT LEAST 1 FOOT AND HORIZONTAL SEPARATION SHALL BE AT LEAST 4 FEET.
- 14) ELECTRICAL FINAL SHALL BE COMPLETED PRIOR TO SCHEDULING E-SQUARED FOR CHECK-OUT, UNLESS REQUIRED OTHERWISE BY

SYSTEM INPUT

[illegible]

BILL OF MATERIALS (BOM)

ITEM	SYM	QTY	MODEL NUMBER	DESCRIPTION	MANUFACTURER	MOUNTING
1	FACP	1	5208	SILENT KNIGHT 10-ZONE CONVENTIONAL FACP	SILENT KNIGHT	EXISTING
2		1	5217	SILENT KNIGHT 10-ZONE EXPANDER	SILENT KNIGHT	EXISTING
3		1	5280	DISPLAY DRIVER	SILENT KNIGHT	EXISTING
4		2		12V 26.0 AH BATTERIES	SILENT KNIGHT	EXISTING
5						
6				NEW EQUIPMENT		
7	②	12	2W-8	DETECTOR PHOTO SMOKE, 2 WIRE CONVENTIONAL	SYSTEM SENSOR	4" SQ., 2.5" DEEP S.G MUDRING
8	①	12	5603	DETECTOR HEAT SMOKE, ADDRESSABLE	SYSTEM SENSOR	4" SQ., 2.5" DEEP S.G MUDRING
9	☐	6	MS-7	PULL STATION, DUAL ACTION, ADDRESSABLE	SILENT KNIGHT	4" SQ., 2.5" DEEP S.G MUDRING
10	BPS	1	HPF-PS6	6 AMP NAC BOOSTER POWER SUPPLY	SILENT KNIGHT	SURFACE, TOP Ø 6"-0"
11		6	SLA 12-8F	12V-8AH BATTERY	DURACELL	FOR NEW BPS PANEL
12	☒ WP	1	P2RK	RED WALL MOUNT HORN/STROBE WEATHERPROOF	SYSTEM SENSOR	MOUNT ON BACKBOX PROVIDED
13	☒	6	P2RLD	RED WALL MOUNT HORN/STROBE	SYSTEM SENSOR	4" SQ., 2.5" DEEP S.G MUDRING
14						
15						
16						
17						
18						
19						
20						
21						
22						
MOUNT MANUAL PULL STATIONS SO ACTUATION LEVER IS AT +48" ABOVE FINISHED FLOOR. MOUNT HORN/STROBES AND STROBES WITH BOTTOM OF STROBE AT +80" ABOVE FINISHED FLOOR. ENTIRE LENS MUST BE BETWEEN 80" & 96" AND NO LESS THAN 6" BELOW C.G. MOUNT ALL PANELS WITH TOP AT 6'-0" AFF. SET STROBE CANDELA OUTPUT AS SHOWN ON PLANS. SET HORNS TO MEDIUM SETTING UNLESS NOTED. LABEL EOL DEVICES WERE APPLICABLE.						 FOR ADDITIONAL MOUNTING OPTIONS SEE DATA SHEETS, PROVIDED.

CABLE/CONDUCTOR LIST

	CABLE/CONDUCTOR LIST					
	CIRCUIT TYPE	CABLE TYPE	NO.	GAUGE	COLOR	NOTES
1	ADDRESSABLE CIRCUIT	FPLP (AQ226-U.G.)	AT,2	12/2 UG 12/2	RED JACKET	NO STRIPE
2	NOTIFICATION ALARM CIRCUIT	FPLP (AQ226-U.G.)	NT-4	14/2	RED JACKET	VARIOUS STRIPES
3	CONVENTIONAL CIRCUIT	FPLP	B	12/2	RED JACKET	WHITE STRIPE
4	24VDC POWER FOR AUX CONTROL FUNCTIONS	FPLP	C	12/2	RED JACKET	PURPLE STRIPE
5	DOOR HOLD POWER	FPLP	P1,2	16/2	RED JACKET	YELLOW STRIPE
6		FPLP		16/2	RED JACKET	BLACK STRIPE
7	ANNUNCIATOR CIRCUIT	THHN	J	14/1	GREEN	
8	BOOSTER POWER SUPPLY TRIGGER CIRCUIT	FPLP	T	14/2	RED JACKET	GRAY STRIPE
9						
10						

ALL CABLES SHOULD BE SOLID, USE U.G./AERIAL RATED CABLE VERSIONS FOR EXTERIOR CABLE RUNS.
ALL CONDUITS SHOULD BE 3/4" MINIMUM/OR AS REQUIRED BY NEC 70 UNLESS OTHERWISE NOTED ON PLANS.



E² Systems
EAGLE ELECTRONIC

E-SQUARED SYSTEMS, LLC
PO BOX 731227 PUYALLUP, WA 98373
PH: 253.284.3707 FAX: 253.284.3714

ISSUE COMMENTS

REV.	DATE	DRN
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SCALE: 1/8"=1'-0"

FIRE/LIFE SAFETY SYSTEM

COVER SHEET

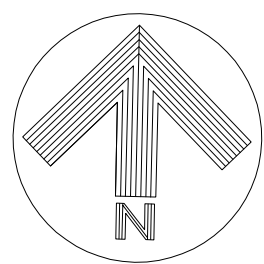
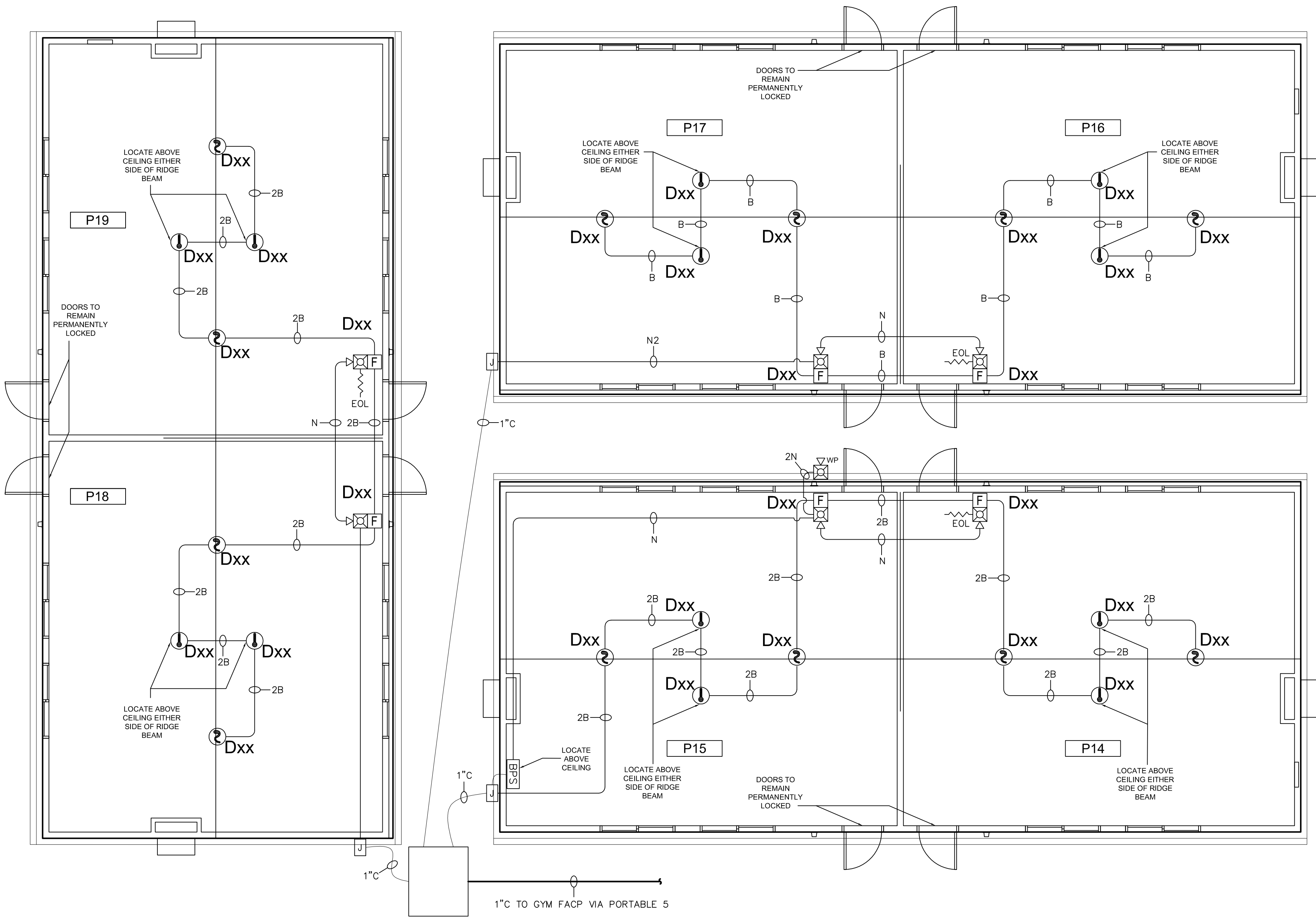
PUYALLUP HIGH SCHOOL –PORTABLES (GYM)
FIRE ALARM SYSTEM

711 W. MAIN ST
PUYALLUP, WA 98148

1430

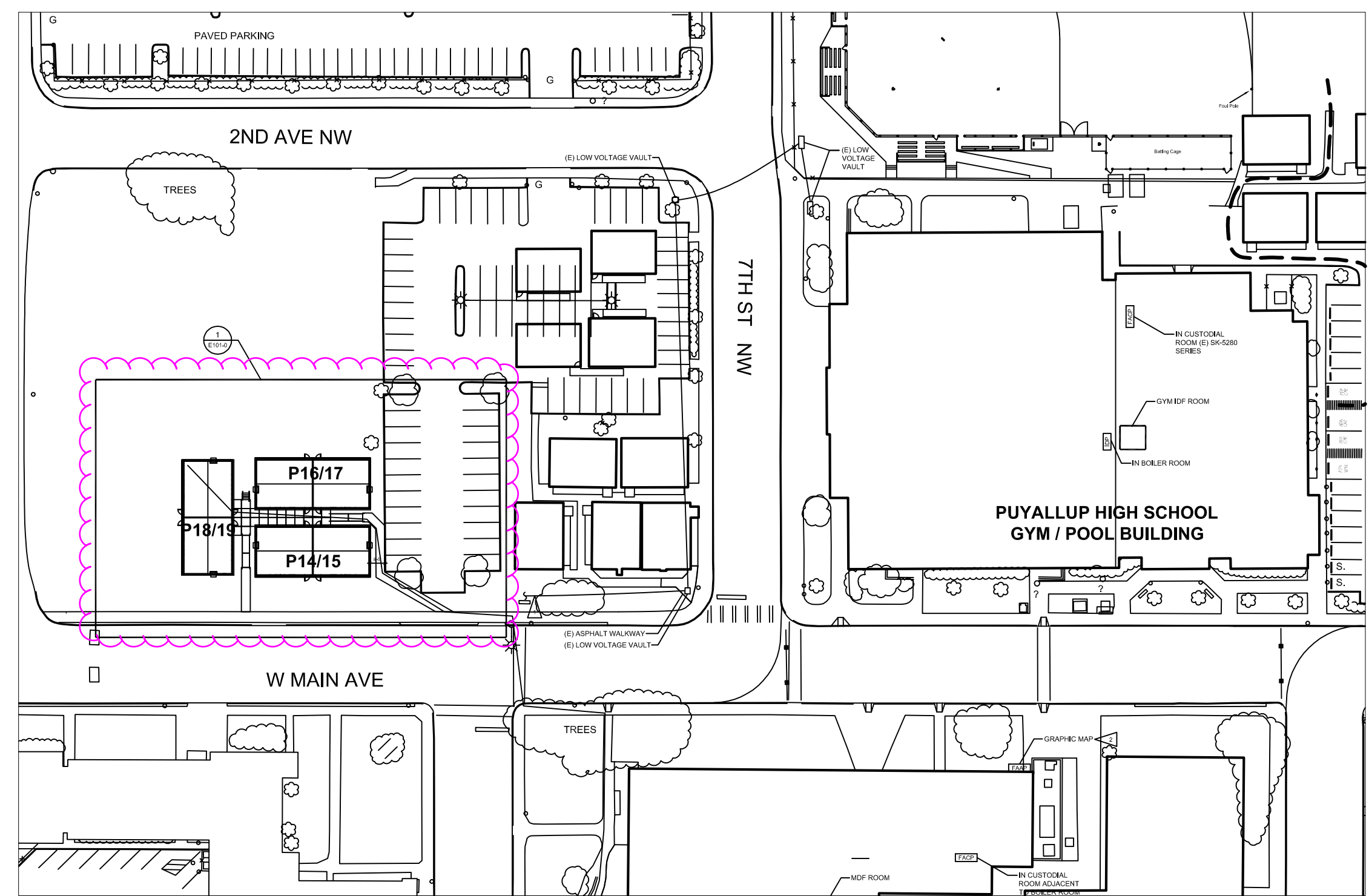
FA-01

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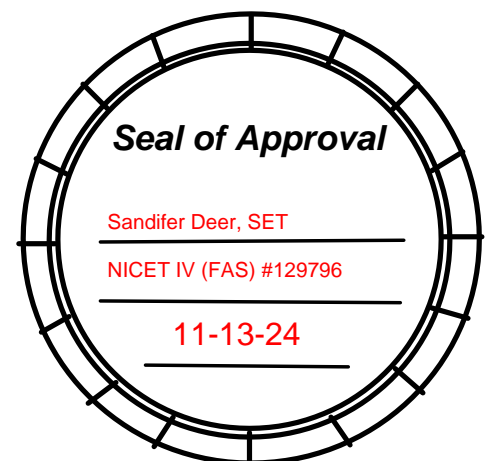
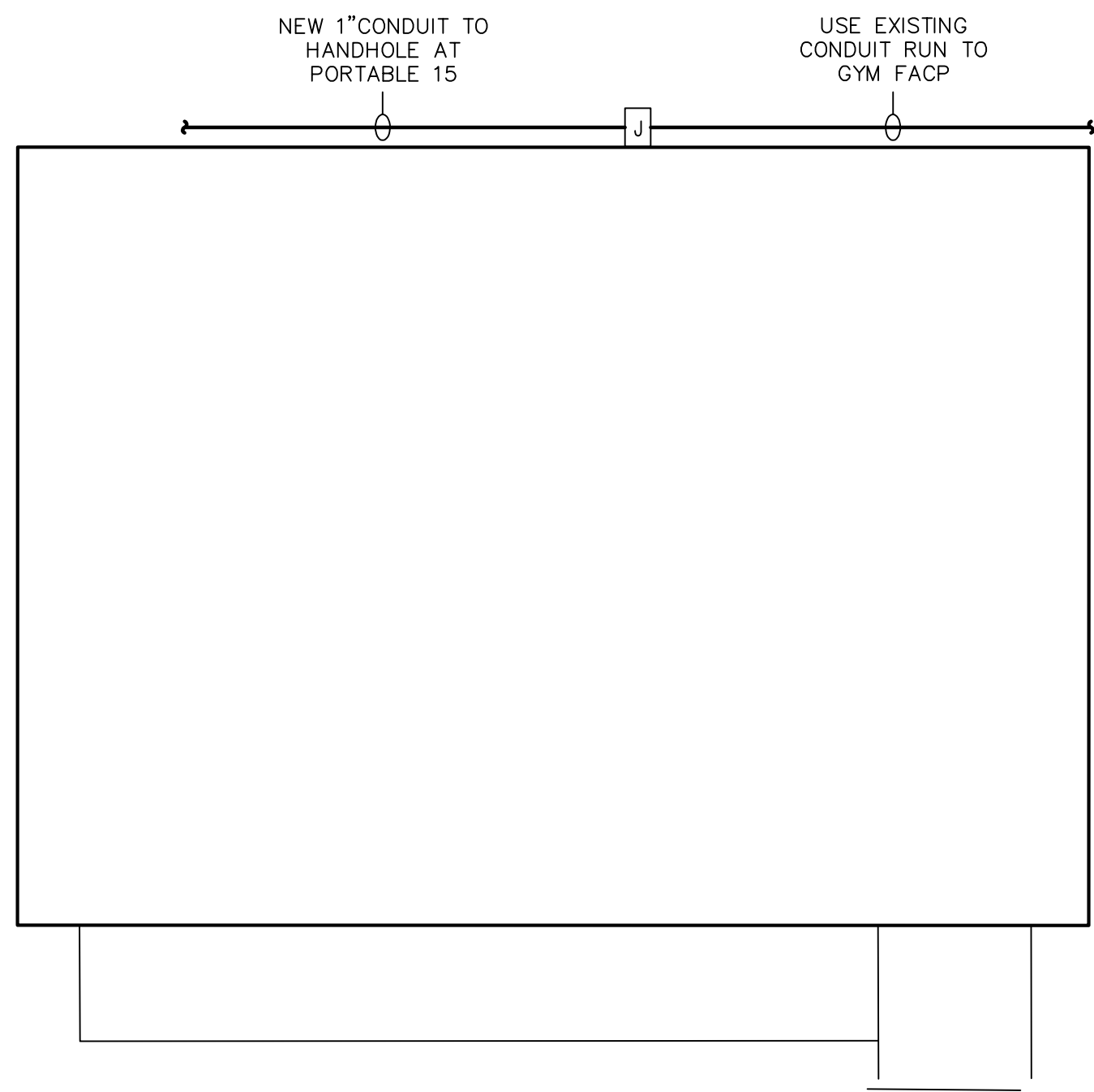


PORTABLES FLOOR PLAN 1
SCALE: N.T.S.

DESIGNED BY:
SANDIFER DEER
NICET IV #129796




SITE MAP 1
SCALE: N.T.S.



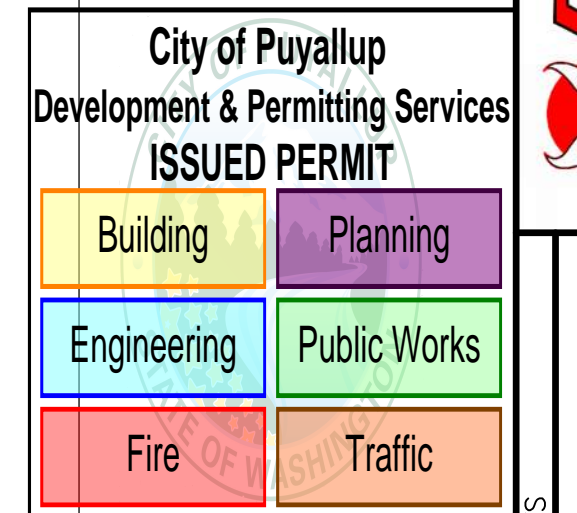
City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

Puyallup High School –Portables (Gym) Fire Alarm System	1430C	FA-02	2 OF 6	711 W MAIN ST PUYALLUP, WA 98374	FLOOR PLAN SITE MAP	FIRE/LIFE SAFETY SYSTEM	SCALE: 1/8"=1'-0"	REV.	DATE	DRN	ISSUE COMMENTS	
							0	11-6-24	SJD	ISSUED FOR APPROVAL		
					E-SQUARED SYSTEMS, LLC PO BOX 731227 PUYALLUP, WA 98373 PH: 253 284 3707 FAX: 253 284 3714		 E ² Systems E-Squared Electronic					



- BACKBONE RISER CALBE PLAN



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

FIRE/LIFE SAFETY SYSTEM

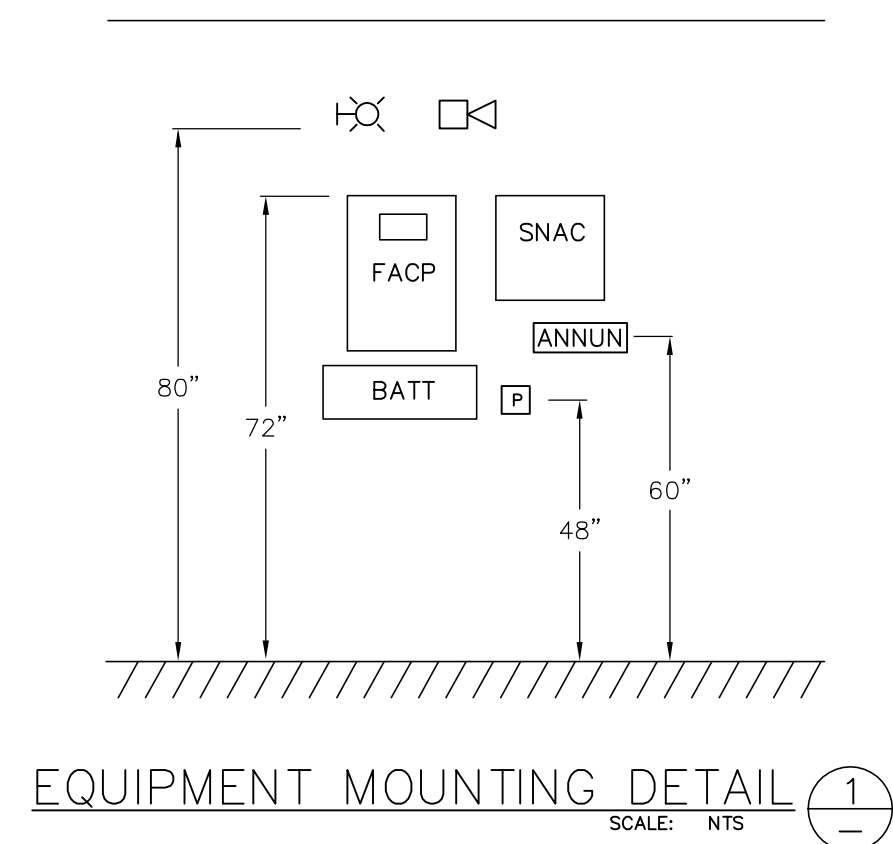
RISER DIAGRAM AND BUILDING DETAIL

711 W MAIN ST
PUYALLUP, WA 98374

430C

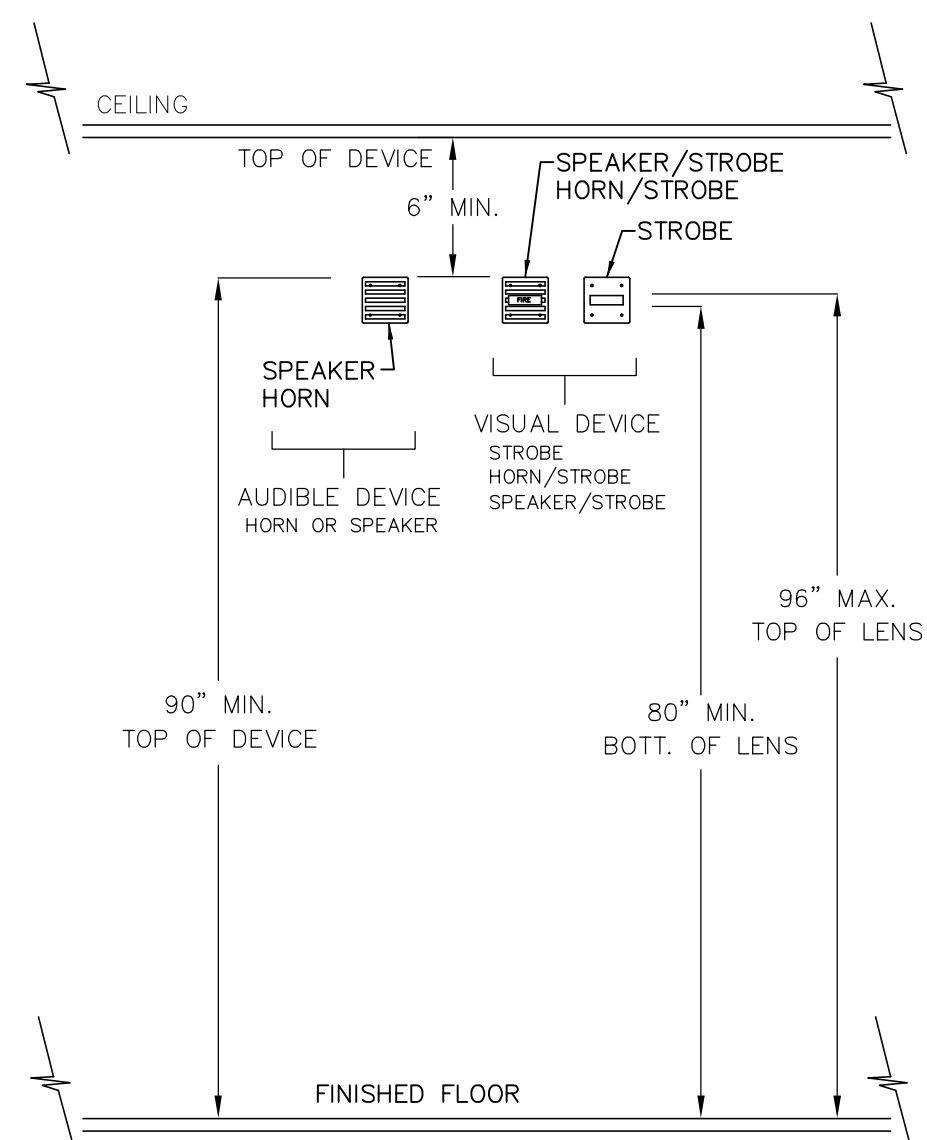
FA-03

DETAILS SHOWN ARE TYPICAL AND ALL
DETAILS MAY NOT APPLY TO ALL JOBS.
REF. LAYOUT DRAWINGS& B.O.M.



NOTES:

1. DETAIL NOT INTENDED TO SHOW SPATIAL RELATIONSHIP OF DEVICES.
REFERENCE FLOOR PLANS FOR ACTUAL LOCATIONS.



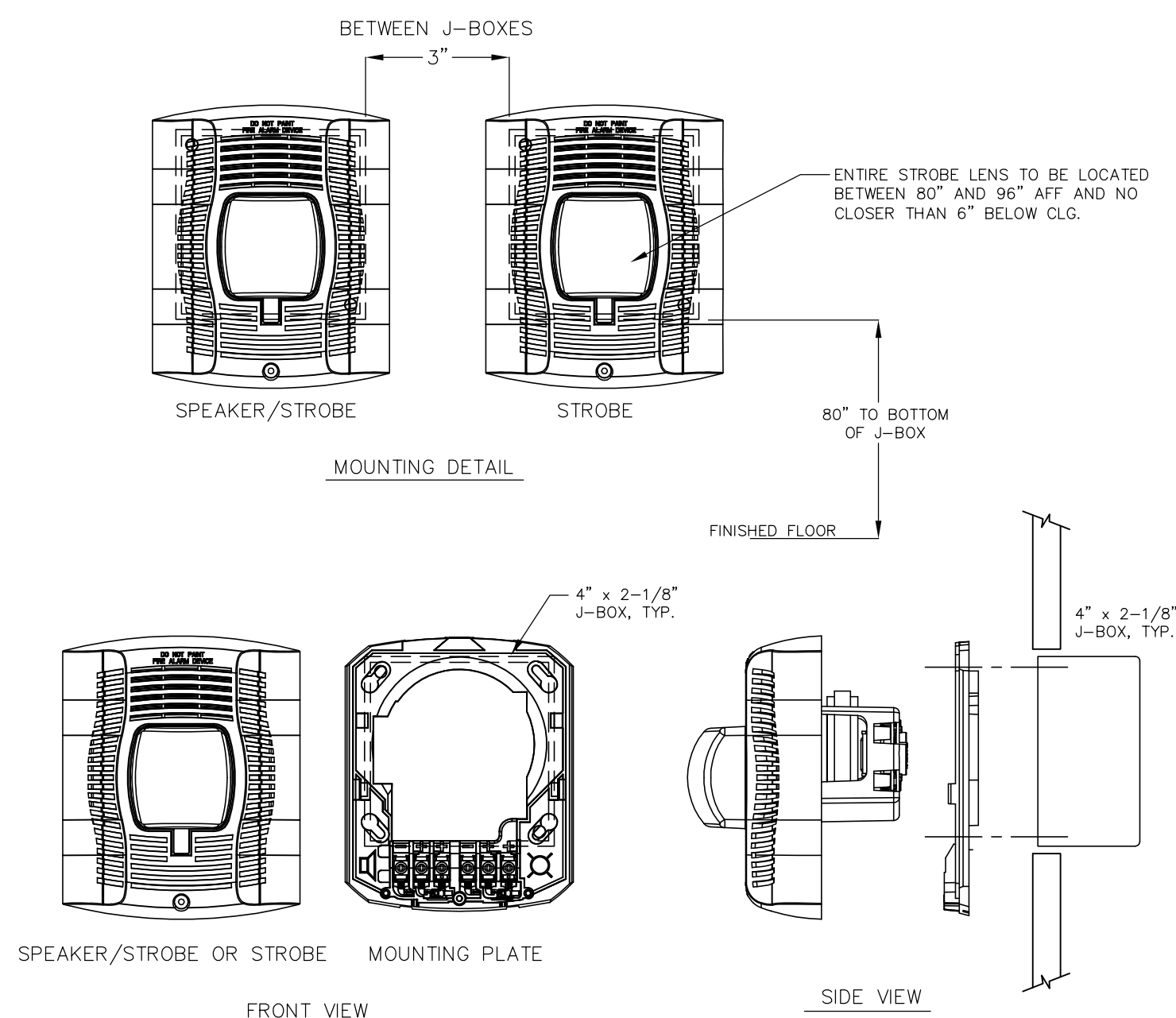
- INSTALLATION NOTES:
1. MOUNT VISUAL AND COMBINATION AUDIBLE/VISUAL APPLIANCES SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" A.F.F.
 2. MOUNT AUDIBLE APPLIANCES SUCH THAT THE TOP OF THE APPLIANCE IS AT A MINIMUM HEIGHT OF 90" A.F.F. AND BELOW THE FINISHED CEILING AT A MINIMUM HEIGHT 6".
 3. IN AREAS WHERE MORE THEN TWO VISIBLE NOTIFICATION APPLIANCES ARE IN ANY FIELD OF VIEW, THEY SHALL FLASH IN SYNCHRONIZATION.
 4. IN CORRIDOR APPLICATIONS:
 - A. VISIBLE NOTIFICATION APPLIANCES SHALL BE LOCATED WITHIN 15' FROM THE END OF A CORRIDOR WITH SEPARATION NOT GREATER THAN 100' BETWEEN APPLIANCES
 - B. WALL-MOUNTED VISIBLE NOTIFICATION APPLIANCES SHALL BE PERMITTED IN EITHER THE END WALL OR THE SIDE WALL OF THE CORRIDOR.
 - C. IF THERE IS AN INTERRUPTION OF THE CONCENTRATED WALKING PATH, SUCH AS A FIRE DOOR, AN ELEVATION CHANGE, OR ANY OTHER OBSTRUCTION, THE AREA SHALL BE TREATED AS A SEPARATE CORRIDOR.
 5. SLEEPING AREAS:
 - A. FOR ROOMS WITH A LINEAR DIMENSION GREATER THAN 16', THE VISIBLE NOTIFICATION APPLIANCES SHALL BE LOCATED WITHIN 16' OF THE PILLOW.
 - B. IF THE DISTANCE FROM THE TOP OF THE STROBE LENS IS EQUAL TO OR GREATER THEN 24" FROM THE CEILING THEN THE STROBE SHALL BE 110cd. IF THE DISTANCE FROM THE TOP OF THE STROBE LENS IS LESS THEN 24" TO THE CEILING THE STROBE SHALL BE 177cd.

MOUNTING HEIGHTS FOR
WALL MOUNTED NOTIFICATION APPLIANCES

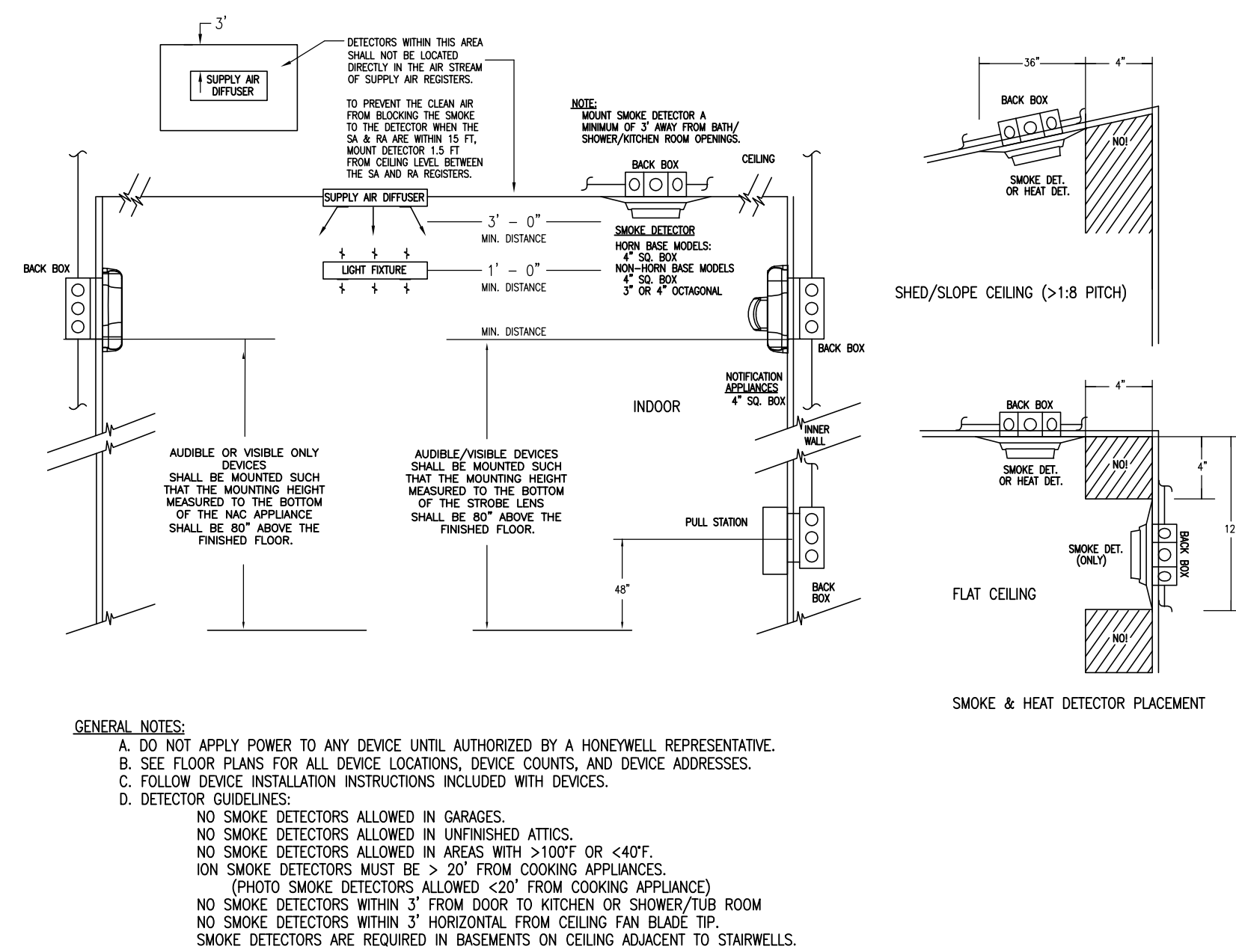
SCALE: NTS

4
—

SET STROBE CANDELA OUTPUT AS SHOWN ON PLANS.
SET HORNS TO MEDIUM UNLESS NOTED OTHERWISE.



TYPICAL WALL MOUNT DETAIL (2)
SCALE: NTS



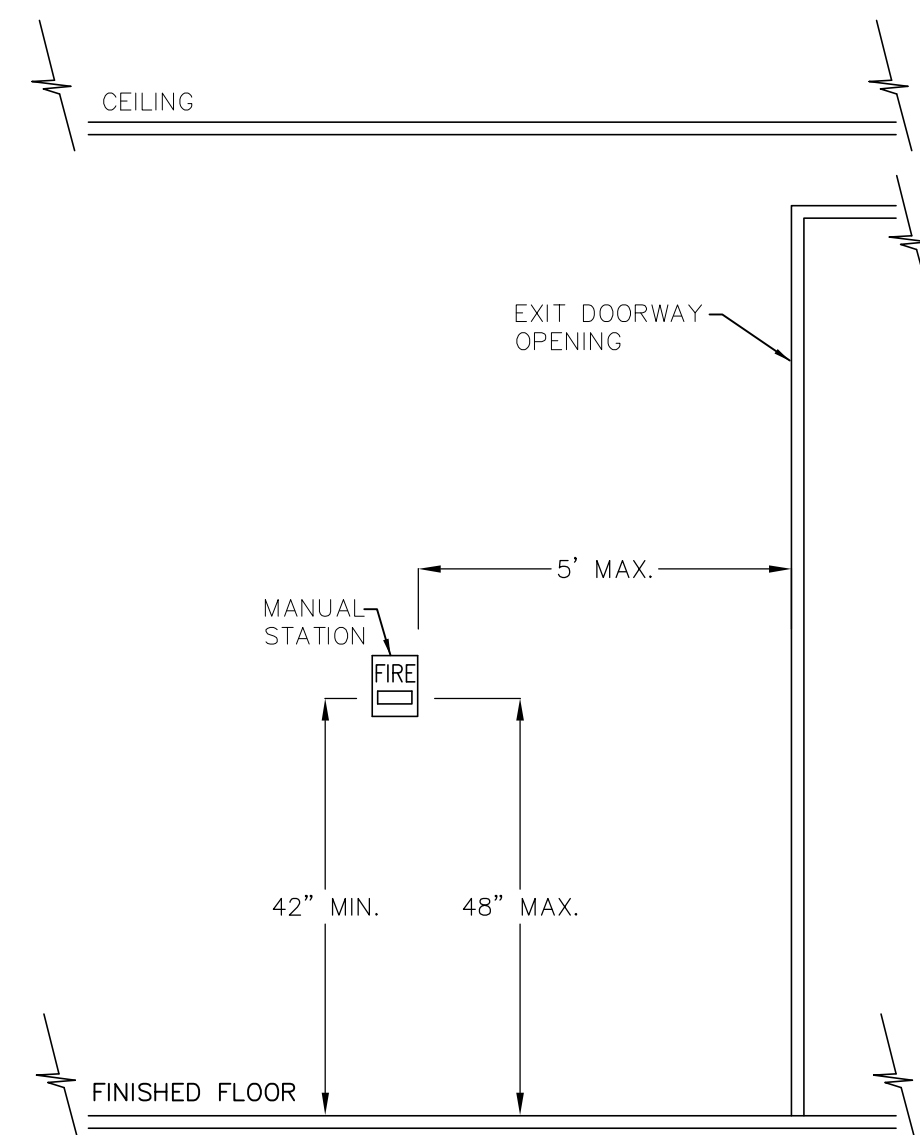
GENERAL NOTES:

- A. DO NOT APPLY POWER TO ANY DEVICE UNTIL AUTHORIZED BY A HONEYWELL REPRESENTATIVE.
- B. SEE FLOOR PLANS FOR ALL DEVICE LOCATIONS, DEVICE COUNTS, AND DEVICE ADDRESSES.
- C. FOLLOW DEVICE INSTALLATION INSTRUCTIONS INCLUDED WITH DEVICES.

DETECTOR GUIDELINES:

- NO SMOKE DETECTORS ALLOWED IN GARAGES.
- NO SMOKE DETECTORS ALLOWED IN UNFINISHED ATTICS.
- NO SMOKE DETECTORS ALLOWED IN AREAS WITH > 10'00' OR < 4'00'.
- ION SMOKE DETECTORS MUST BE > 20' FROM COOKING APPLIANCES.
- (PHOTO SMOKE DETECTORS ALLOWED < 20' FROM COOKING APPLIANCES.)
- NO SMOKE DETECTORS WITHIN 3' FROM DOOR TO KITCHEN OR SHOWER/TUB ROOM.
- NO SMOKE DETECTORS WITHIN 3' HORIZONTAL FROM CEILING FAN OR LIGHT.
- SMOKE DETECTORS ARE REQUIRED IN BASEMENTS ON CEILING ADJACENT TO STAIRWELLS.

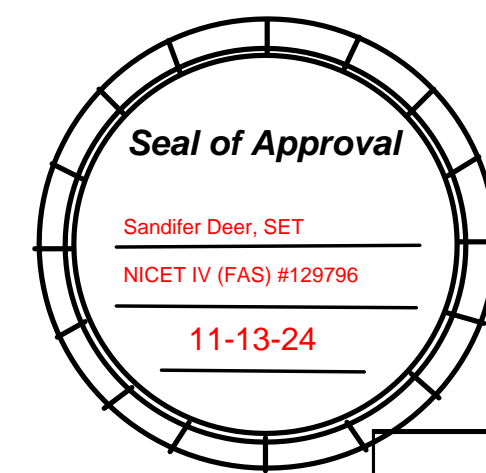
ADDITIONAL DEVICE MOUNTING DETAILS (5)
SCALE: NTS



1. INSTALLATION NOTES:
THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL BE NOT LESS THEN 42" AND NOT GREATER THAN 48" A.F.F.
2. MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 5' OF THE EXIT DOORWAY OPENING ON EACH FLOOR.

MANUAL STATION MOUNTING DETAILS 3
SCALE: NTS

DESIGNED BY:
SANDIFER DEER
NICET IV #129796



City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic