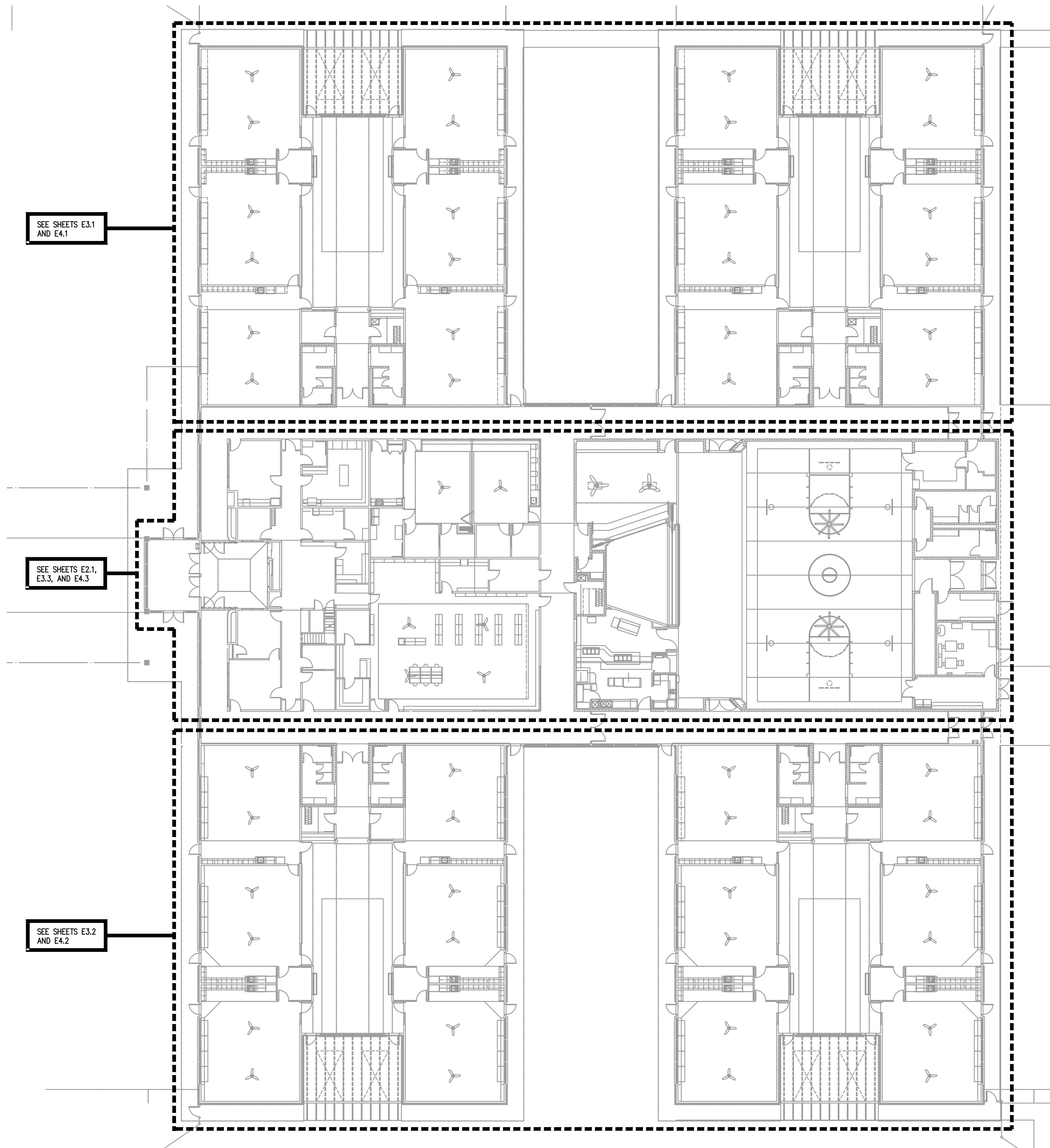




1 OVERALL FLOOR PLAN – ELECTRICAL
E1.0 SCALE: 1/16" = 1'-0"

MEFA
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER



B B T

A R C H I T E C T S

1160 nw Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.382.5535 | f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary
20805 Cooley Road
Bend, Oregon 97701

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

SHEET TITLE

OVERALL
FLOOR PLAN
ELECTRICAL

SHEET NUMBER

E1.0

TYPE	LAMP	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	OPTIONS
'A'	LED (34W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE 0-10V DIMMING
'A2'	LED (41W)	LITHONIA OR APPROVED	VTL4 SERIES	TYPE :1 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE 0-10V DIMMING
'A3'	LED (47W)	LITHONIA OR APPROVED	VTL4 SERIES	TYPE :1 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4800 LUMEN 3500K COLOR TEMPERATURE
'A4'	LED (39W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4800 LUMEN 3500K COLOR TEMPERATURE 0-10V DIMMING
'A5'	LED (27W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 3000 LUMEN 3500K COLOR TEMPERATURE 0-10V DIMMING
'A6'	LED (34W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE
'A7'	LED (34W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE STEPPED DIMMING
'A8'	LED (41W)	LITHONIA OR APPROVED	VTL4 SERIES	TYPE :1 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE
'A9'	LED (39W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4800 LUMEN 3500K COLOR TEMPERATURE
'A10'	LED (39W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4800 LUMEN 3500K COLOR TEMPERATURE STEPPED DIMMING
'A11'	LED (27W)	LITHONIA OR APPROVED	2VTL4 SERIES	TYPE :2 X 4 INDIRECT LED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC LINEAR PRISMATIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 3000 LUMEN 3500K COLOR TEMPERATURE
'B'	LED (21W)	LITHONIA OR APPROVED	LDN7RV SERIES	TYPE :RETROFIT 7" LED DOWNLIGHT MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :SEMI-SPECULAR FINISH VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 1500 LUMEN 3500K COLOR TEMPERATURE 0-10V DIMMING
'B2'	LED (21W)	LITHONIA OR APPROVED	LDN7RV SERIES	TYPE :RETROFIT 7" LED DOWNLIGHT MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :SEMI-SPECULAR FINISH VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 1000 LUMEN 3500K COLOR TEMPERATURE
'B3'	LED (21W)	LITHONIA OR APPROVED	LDN7RV SERIES	TYPE :RETROFIT 7" LED DOWNLIGHT MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :SEMI-SPECULAR FINISH VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 1500 LUMEN 3500K COLOR TEMPERATURE
'C'	LED (30W)	LITHONIA OR APPROVED	ZLID SERIES	TYPE :4' LED STRIPLIGHT MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :DROP LENS VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 3000 LUMEN 3500K COLOR TEMPERATURE
'D'	LED (35W)	LITHONIA OR APPROVED	STL4 SERIES	TYPE :4' LED WRAP MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE
'F'	LED (19W)	LITHONIA OR APPROVED	WL4 SERIES	TYPE :4' LED BRACKET MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 2000 LUMEN 3500K COLOR TEMPERATURE

TYPE	LAMP	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	OPTIONS
'F2'	LED (28W)	LITHONIA OR APPROVED	WL4 SERIES	TYPE :4' LED BRACKET MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 3000 LUMEN 3500K COLOR TEMPERATURE
'G'	LED (29W)	FINELITE OR APPROVED	HP4-ID SERIES	TYPE :4' LINEAR DIRECT / INDIRECT LED MOUNTING :AIRCRAFT CABLE HOUSING :ALUMINUM LENS/REFL :FLUSH LENS DOWN/GLOW OPTICS UP VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: FINISH SELECTED BY ARCHITECT 90 DEGREE CORNER CONNECTORS STANDARD UP/STANDARD DOWN OUTPUT 3500K COLOR TEMPERATURE EMERGENCY FEEDS PER PLAN
'H'	LED (146W)	LITHONIA OR APPROVED	IBH SERIES	TYPE :4' LED HIGHBAY MOUNTING :TONG HANGER BRACKET HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 18000 LUMEN 3500K COLOR TEMPERATURE MEDIUM DISTRIBUTION 360 DEGREE MOTION SENSOR
'H2'	LED (146W)	LITHONIA OR APPROVED	IBH SERIES	TYPE :4' LED HIGHBAY MOUNTING :TONG HANGER BRACKET HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 18000 LUMEN 3500K COLOR TEMPERATURE MEDIUM DISTRIBUTION
'J'	LED (42W)	GOTHAM OR APPROVED	EVO SERIES	TYPE :8" CYLINDAR DOWNLIGHT MOUNTING :PENDANT HOUSING :ALUMINUM LENS/REFL :MEDIUM WIDE DISTRIBUTION VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 3000 LUMEN 3500K COLOR TEMPERATURE FINISH SELECTED BY ARCHITECT
'K'	LED (42W)	GOTHAM OR APPROVED	EVO SERIES	TYPE :8" CYLINDAR DOWNLIGHT MOUNTING :WALL MOUNT HOUSING :ALUMINUM LENS/REFL :MEDIUM WIDE DISTRIBUTION VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 2000 LUMEN 3500K COLOR TEMPERATURE FINISH SELECTED BY ARCHITECT
'L'	LED (32W)	LITHONIA OR APPROVED	ZTL4 SERIES	TYPE :2 X 4 LENSED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :#12 PRISMATIC ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 4000 LUMEN 3500K COLOR TEMPERATURE
'L2'	LED (21W)	LITHONIA OR APPROVED	TL4 SERIES	TYPE :1 X 4 LENSED TROFFER MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :#12 PRISMATIC ACRYLIC VOLTAGE :277V BALLAST :LED DRIVER	PROVIDE WITH: 2000 LUMEN 3500K COLOR TEMPERATURE

ELECTRICAL SYMBOLS LIST

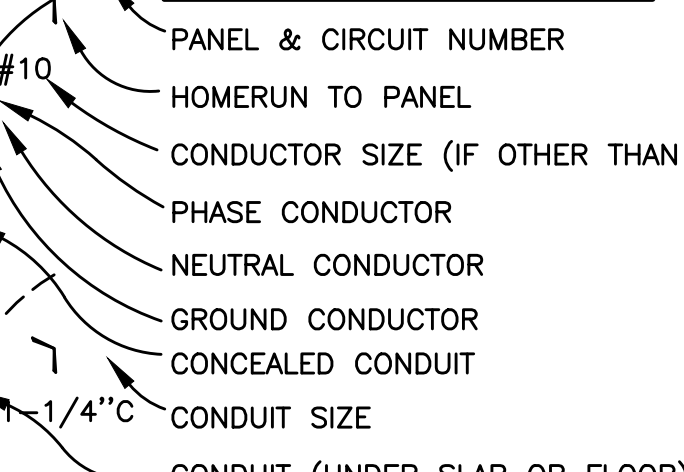
LIGHTING SYMBOLS

- | | |
|---|---|
|  | LIGHT FIXTURE, RECESSED |
|  | LIGHT FIXTURE, RECESSED – UNSWITCHED EMERGENCY |
|  | LIGHT FIXTURE, SURFACE MOUNT |
|  | LIGHT FIXTURE, SURFACE MOUNT – UNSWITCHED EMERGENCY |
|  | LIGHT FIXTURE, STRIP |
|  | LIGHT FIXTURE, STRIP – UNSWITCHED EMERGENCY |
|  | DOWNLIGHT FIXTURE, RECESSED |
|  | DOWNLIGHT FIXTURE, RECESSED – UNSWITCHED EMERGENCY |
|  | DOWNLIGHT FIXTURE, RECESSED, WALLWASH |
|  | LIGHT FIXTURE, WALL MOUNT |
|  | LIGHT FIXTURE, CEILING MOUNT |
|  | RECESSED LIGHT FIXTURE, WALL MOUNT |
|  | LIGHT FIXTURE, WALL MOUNT |
|  | LIGHT FIXTURE, WALL SCONCE |
|  | LIGHT FIXTURE, TRACK W/ HEADS AS SHOWN ON PLAN |
|  | EXIT SIGN, UNIVERSAL MOUNT, W/ DIRECTIONAL ARROW |
|  | EXIT SIGN, WALL MOUNT, +8'-0" A.F.F. |
|  | EMERGENCY LIGHT W/ BATTERY PACK, +8'-0" A.F.F. |
| | FLOOD LIGHT |
| | AREA LUMINAIRE |
| | AREA LUMINAIRE W/STANDBY LAMP |
| | AREA LUMINAIRE, WALL MOUNT |
| | AREA LUMINAIRE, POLE MOUNT |

SWITCH SYMBOLS

- | | |
|------------------|----------------------------|
| \$ | SWITCH, SPST +48" A.F.F. |
| \$ ₃ | SWITCH, 3-WAY +48" A.F.F. |
| OS | DUAL-TECH OCCUPANCY SENSOR |
| PP | CONTROLS POWER PACK |
| \$ ₆ | DIMMER STATION, 0-10V |
| \$ ₃₀ | MULTI-WAY STATION, 0-10V |

WIRING SYMBOLS

- ## WIRING SYMBOLS
- 
- The diagram illustrates various wiring symbols used in electrical schematics. It includes a curved line with arrows pointing to different parts of the symbol, each corresponding to a label. The symbols include a panel and circuit number (2A-9), a homerun to a panel (labeled #10), conductor size (labeled #12), phase conductor, neutral conductor, ground conductor, concealed conduit (indicated by a dashed line), conduit size (labeled 1-1/4" C), and conduit under a slab or floor (indicated by a dashed line with a cross-hatch pattern).
- 2A-9 PANEL & CIRCUIT NUMBER
 - #10 HOMERUN TO PANEL
 - #12 CONDUCTOR SIZE (IF OTHER THAN #12)
 - PHASE CONDUCTOR
 - NEUTRAL CONDUCTOR
 - GROUND CONDUCTOR
 - CONCEALED CONDUIT
 - 1-1/4" C CONDUIT SIZE
 - CONDUIT (UNDER SLAB OR FLOOR)
- → CONDUIT, STUBBED & CAPPED

ONE-LINE DIAGRAM SYMBOLS

- PANEL 'A'
- ELECTRICAL DISTRIBUTION PANELBOARD
- 200/3
- CIRCUIT BREAKER (TRIP RATING & POLES AS INDICATED ON PLAN)

POWER SYMBOLS

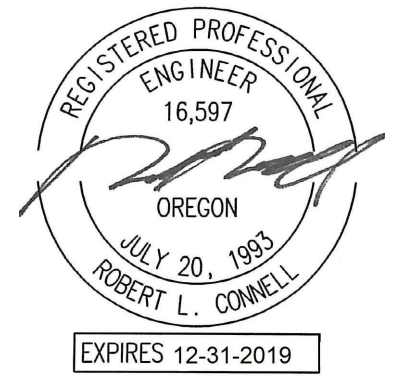
- | | |
|--|--|
|  | RECEPTACLE, DUPLEX +18" A.F.F. |
|  | RECEPTACLE, QUAD +18" A.F.F. |
|  T.R. | RECEPTACLE, DUPLEX, TAMPER-RESISTANT +18" A.F.F. |
|  | ELECTRICAL DISTRIBUTION PANEL |
|  | ELECTRICAL CONNECTION |
|  | DISCONNECT, FUSED |
|  | ELECTRICAL JUNCTION BOX |

NOTATIONS

-  DRAWING NOTE
 DETAIL REFERENCE: TOP=DETAIL NO., BOTTOM=SHEET NO.

ABBREVIATIONS

- | | | |
|--------|--------------------------|--------------------|
| 'A' | LIGHT FIXTURE TYPE | (SEE FIXTURE LIST) |
| CU | COPPER | |
| (E) | EXISTING | |
| G.F.I. | GROUND FAULT INTERRUPTER | |
| GND | GROUND | |
| MCB | MAIN CIRCUIT BREAKER | |
| MLO | MAIN LUGS ONLY | |
| PH | PHASE | |
| W.P. | WEATHERPROOF | |



B B T

A R C H I T E C T S

1160 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.382.5531 f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES

**20805 Cooley Road
Bend, Oregon 97701**

ISSUED: _____ DATE: _____

02/14/18

PERMIT SET / BID SET

3 NUMBER:	1708
-----------	------

DRAWN BY: CAW

CHECKED BY: RLC

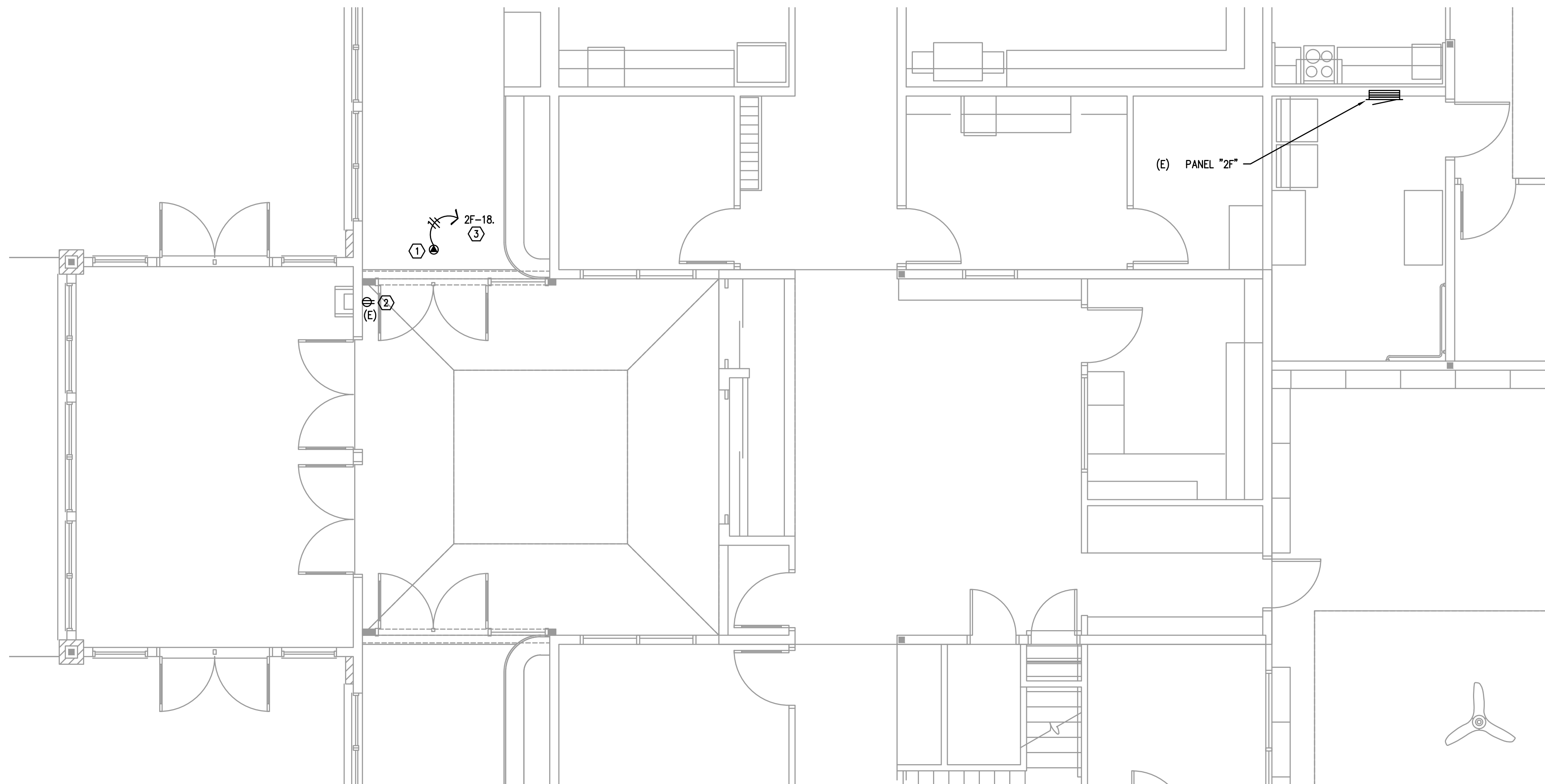
SHEET TITLE

ELECTRICAL SYMBOL LIST AND LIGHTING FIXTURE LIST

SHEET NUMBER

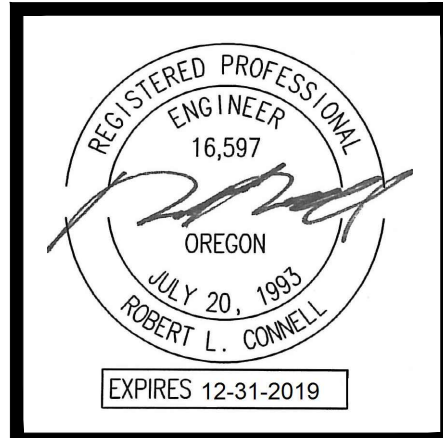
E1.1

- ① DOOR CONTROLLER POWER SUPPLY CONNECTION. COORDINATE EXACT LOCATION WITH DOOR HARDWARE SPECIFICATIONS AND DOOR HARDWARE SUPPLIER.
- ② EXISTING RECEPTACLE TO REMAIN.
- ③ CONNECT TO SPARE 20A/1P CIRCUIT BREAKER IN EXISTING PANEL.



1 E2.1 ENLARGED FLOOR PLAN – ELECTRICAL SCALE: 1/4" = 1'-0"

MFIA
INC. Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER



BBT

A R C H I T E C T S

1160 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.382.5535 | f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary

20805 Cooley Road
Bend, Oregon 97701

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

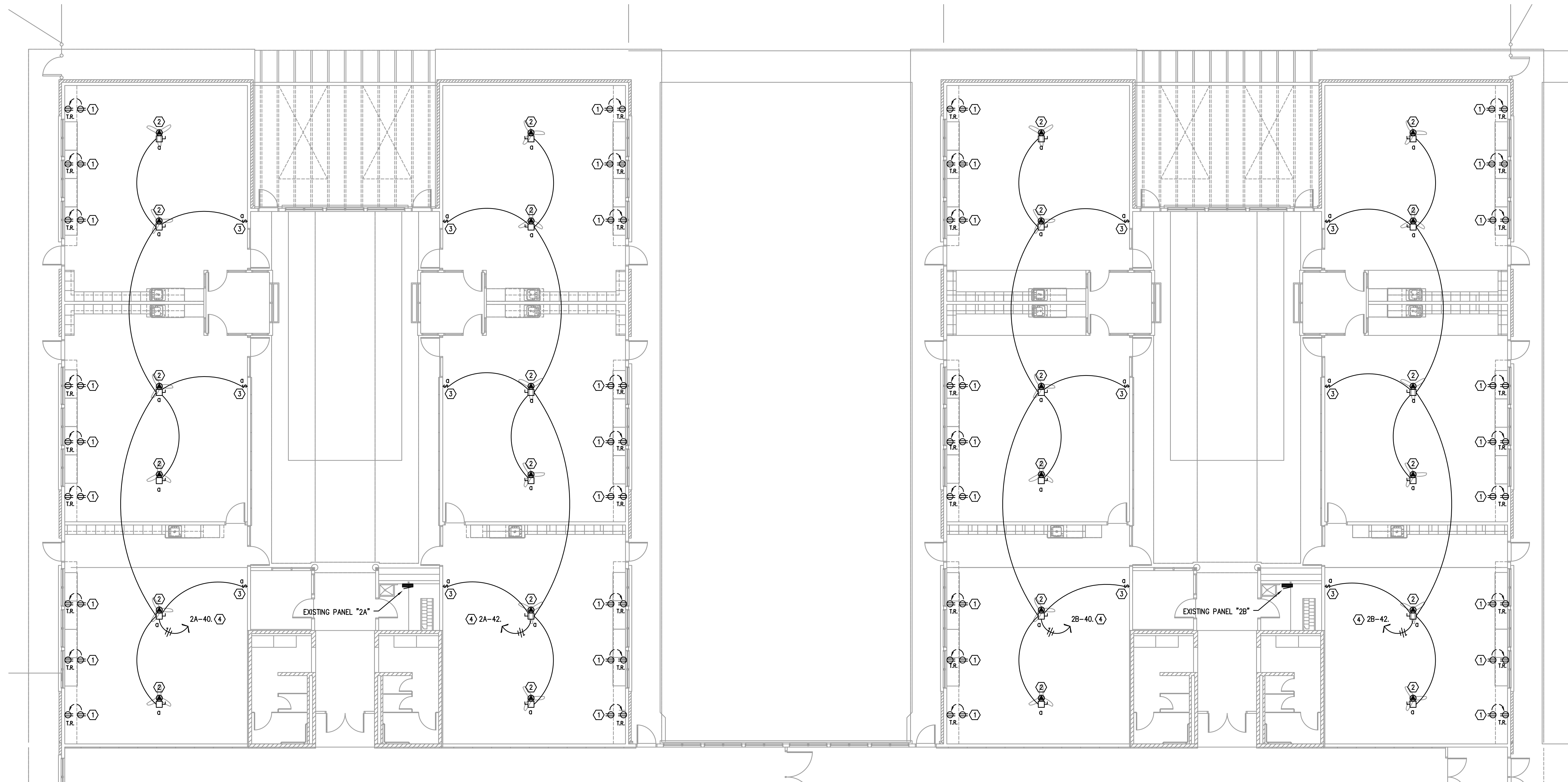
JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

SHEET TITLE

ENLARGED
FLOOR PLAN
ELECTRICAL

SHEET NUMBER
E2.1

①	EXISTING TOE-KICK RECEPTACLE TO BE REPLACED WITH NEW T.R. RECEPTACLE AND RELOCATED INTO WALL AS SHOWN. EXTEND EXISTING BRANCH CIRCUIT TO NEW LOCATION AND RECONNECT. PROVIDE RECEPTACLE WITH NEW STAINLESS STEEL COVER PLATE. PATCH / REPAIR SHEETROCK AS REQUIRED.	③	CEILING FAN/LIGHT UNIT CONTROL STATION. INSTALL ADJACENT TO EXISTING LIGHT SWITCH LOCATION. INSTALL WIRING PER MANUFACTURERS RECOMMENDATION TO CONTROL FAN/LIGHT UNITS SERVING THIS ROOM.
②	CONNECTION FOR CEILING FAN/LIGHT UNIT. VERIFY REQUIREMENTS WITH SUPPLIER.	④	CONNECT TO EXISTING SPARE 20A/1P CIRCUIT BREAKER.



1 ENLARGED FLOOR PLAN – POWER
E3.1 SCALE: 1/8" = 1'-0"

MFIA
INC. Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER



B B T

A R C H I T E C T S

1160 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
 t 541.382.5535 | f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary
20805 Cooley Road
Bend, Oregon 97701

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

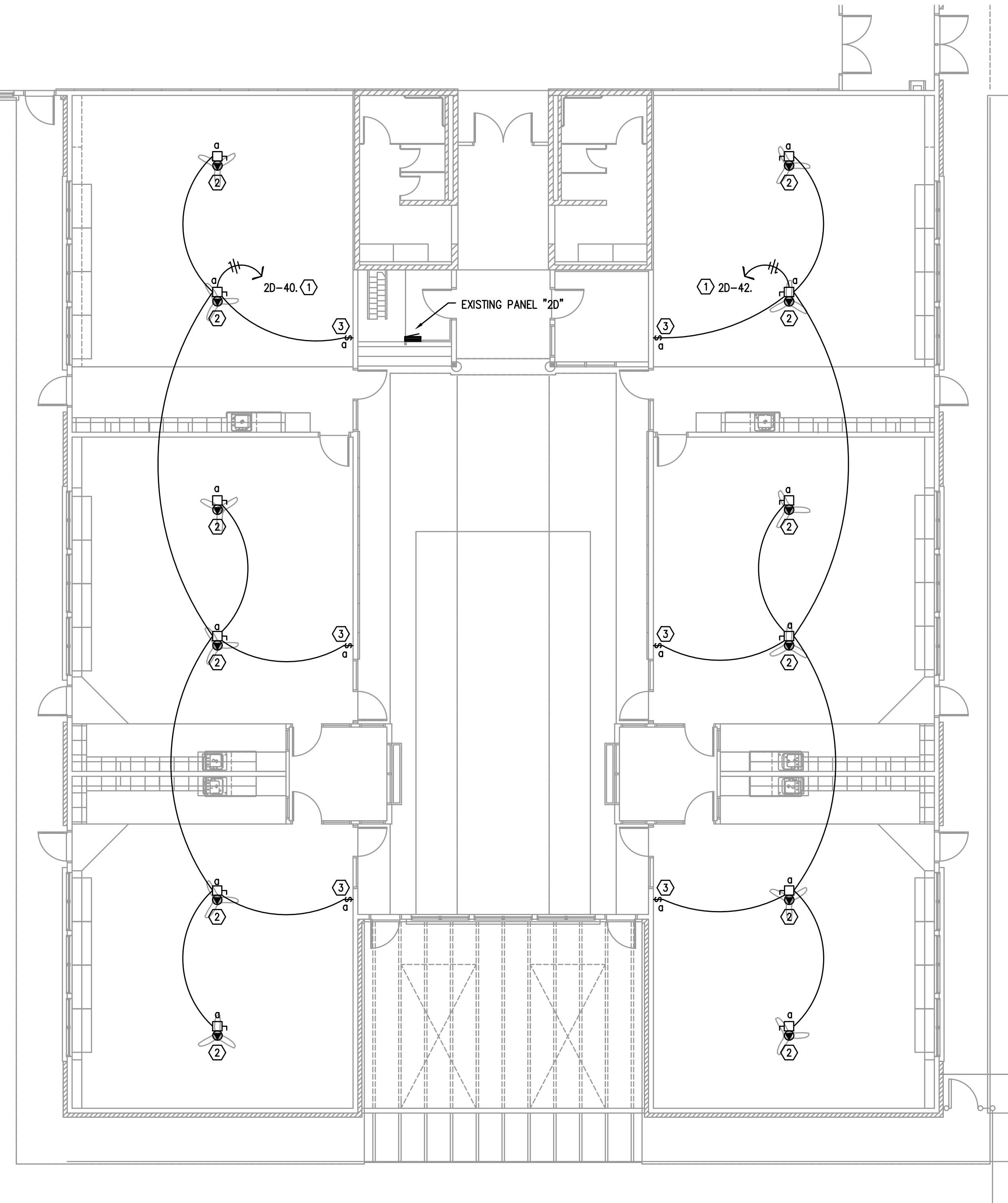
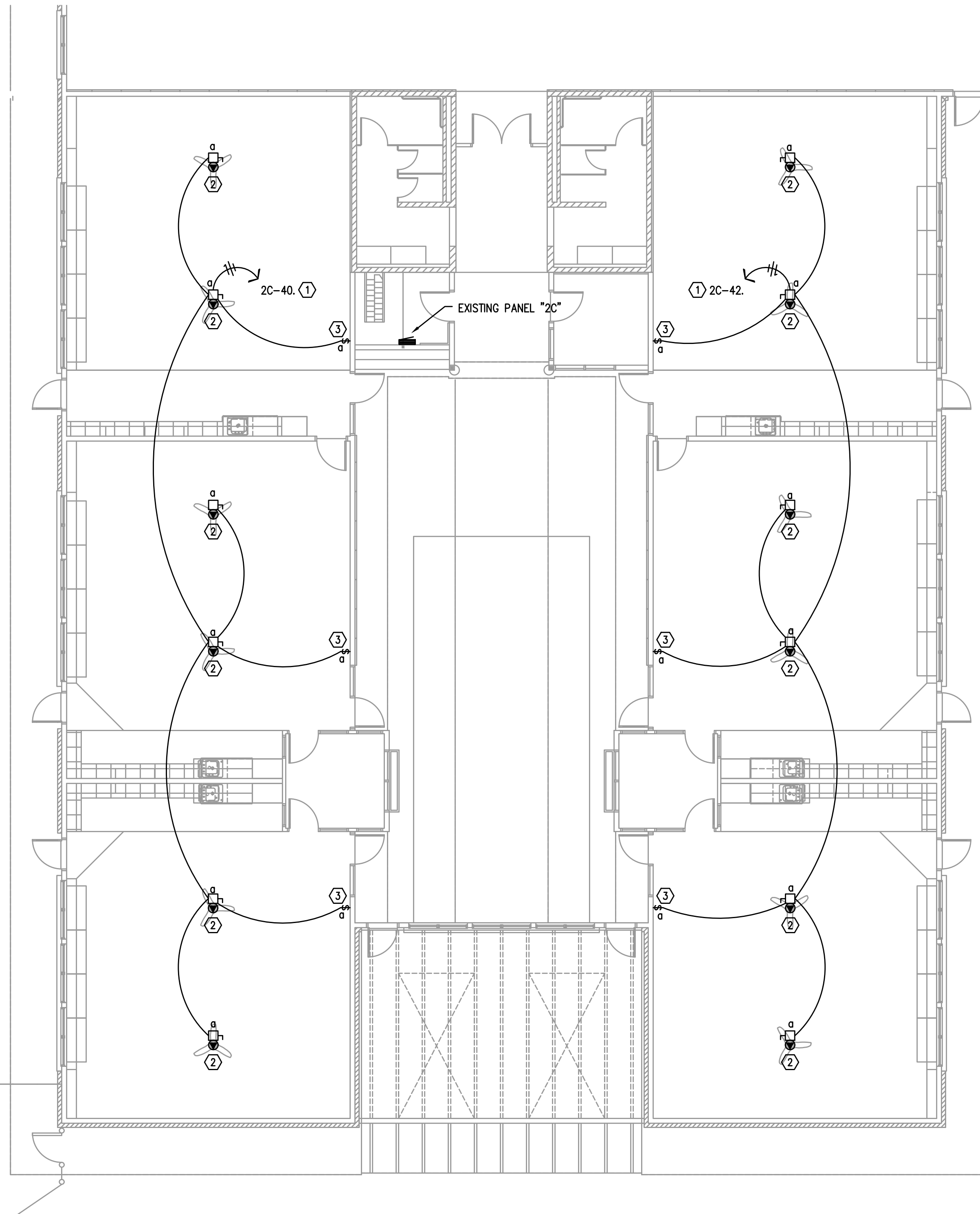
SHEET TITLE

ENLARGED
FLOOR PLAN
POWER

SHEET NUMBER

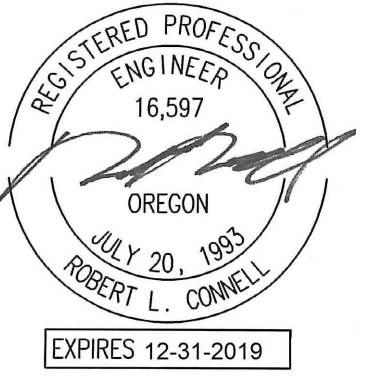
E3.1

- ① CONNECT TO EXISTING SPARE 20A/1P CIRCUIT BREAKER.
- ② CONNECTION FOR CEILING FAN/LIGHT UNIT. VERIFY REQUIREMENTS WITH SUPPLIER.
- ③ CEILING FAN/LIGHT UNIT CONTROL STATION. INSTALL ADJACENT TO EXISTING LIGHT SWITCH LOCATION. INSTALL WIRING PER MANUFACTURERS RECOMMENDATION TO CONTROL FAN/LIGHT UNITS SERVING THIS ROOM.



1 ENLARGED FLOOR PLAN — POWER
E3.2 SCALE: 1/8" = 1'-0"

**M
F
A
INC.** Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER



B B T

A R C H I T E C T S

1160 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.382.5335 | f 541.389.8003

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary
20805 Cooley Road
Bend, Oregon 97701

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

SHEET TITLE

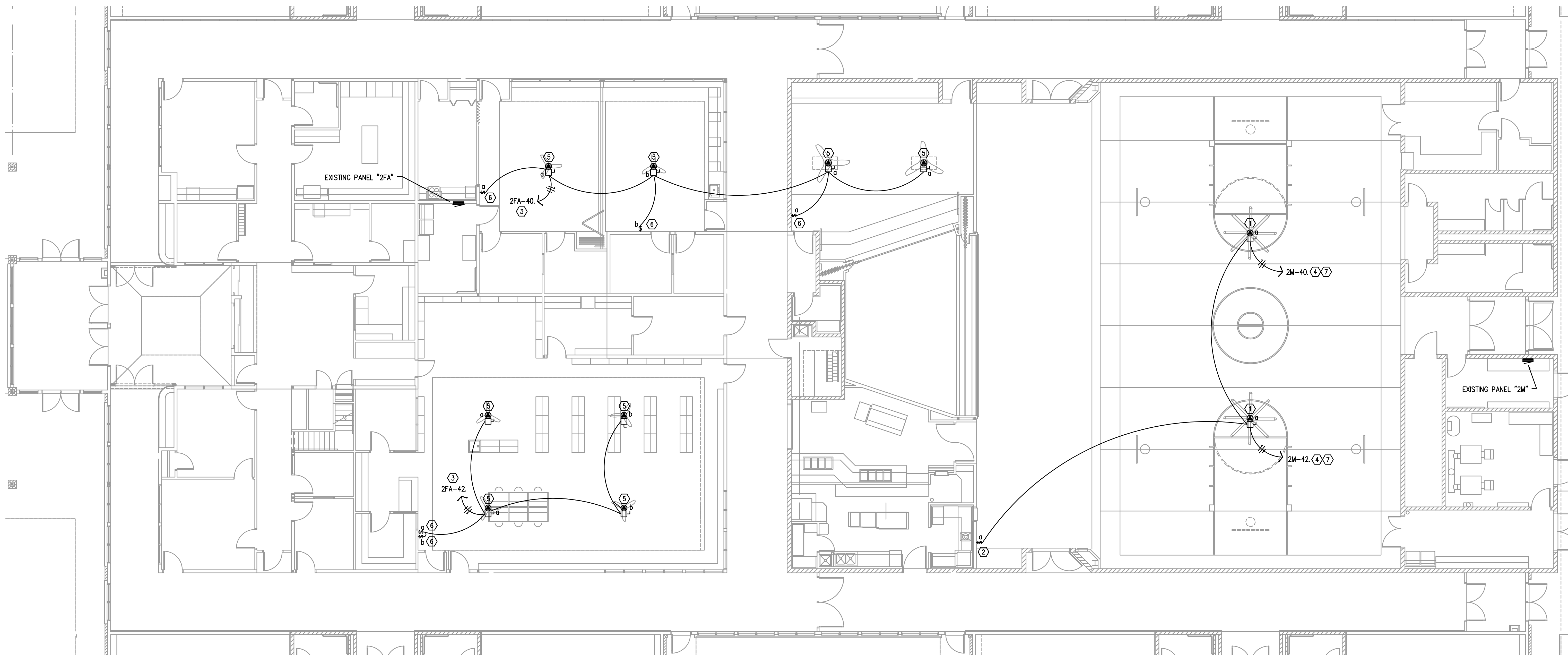
ENLARGED
FLOOR PLAN
POWER

SHEET NUMBER

E3.2

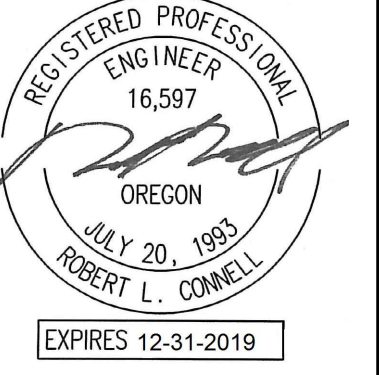
PLAN NOTES

- ① CONNECTION FOR CEILING FAN. VERIFY REQUIREMENTS WITH FAN SUPPLIER.
- ② CEILING FAN SYSTEM CONTROL STATION. INSTALL ADJACENT TO EXISTING LIGHT SWITCH LOCATION. INSTALL CONTROL CABLE PER MANUFACTURERS RECOMMENDATION TO CONTROL FANS SERVING THIS ROOM.
- ③ CONNECT TO EXISTING SPARE 20A/1P CIRCUIT BREAKER.
- ④ INSTALL 20A/1P CIRCUIT BREAKER IN EXISTING PANEL SPACE.
- ⑤ CONNECTION FOR CEILING FAN/LIGHT UNIT. VERIFY REQUIREMENTS WITH SUPPLIER.
- ⑥ CEILING FAN/LIGHT UNIT CONTROL STATION. INSTALL ADJACENT TO EXISTING LIGHT SWITCH LOCATION. INSTALL WIRING PER MANUFACTURERS RECOMMENDATION TO CONTROL FAN/LIGHT UNITS SERVING THIS ROOM.
- ⑦ ROUTE BRANCH CIRCUIT VIA FIRE ALARM MODULE. SEE LOW-VOLTAGE DRAWINGS.



1
E3.3 ENLARGED FLOOR PLAN – POWER
SCALE: 1/8" = 1'-0"

MFI
INC.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
www.MFI-ENG.COM
CONTACT: CHRIS WINER



B B T

A R C H I T E C T S

1160 sw Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.386.5535 | f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary

**20805 Cooley Road
Bend, Oregon 97701**

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

SHEET TITLE

ENLARGED
FLOOR PLAN
POWER

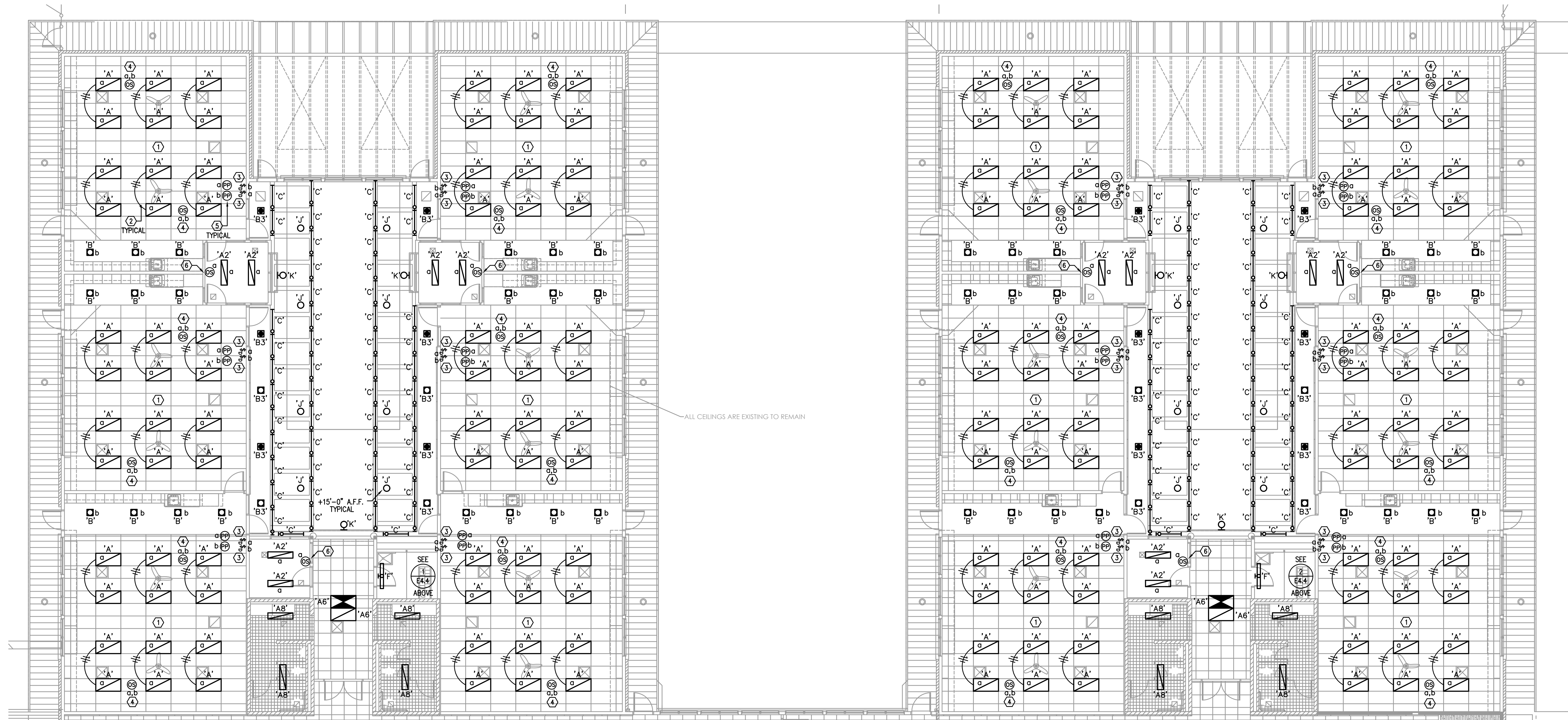
SHEET NUMBER

E3.3

PLAN NOTES

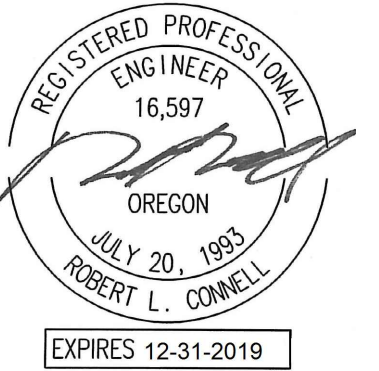
- | | | | |
|---|---|---|---|
| ① | BRANCH CIRCUIT WIRING IN THIS ROOM CONSIST OF "RELOC" MODULAR WIRING SYSTEM. "RELOC" WIRING SYSTEM TO BE MODIFIED AS REQUIRED TO INTEGRATE NEW LIGHTING FIXTURES AND CONTROLS. | ④ | DUAL-TECH CEILING OCCUPANCY SENSOR. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. OCCUPANCY SENSOR: SENSOR SWITCH "CM-PDT-9" SERIES. |
| ② | PROVIDE BRANCH CIRCUITING TO INTERCONNECT NEW FIXTURES WHERE TANDEM WIRED FIXTURES WERE ORIGINALLY INSTALLED. | ⑤ | CONTROLS POWER PACK. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. |
| ③ | REMOVE EXISTING CONTROL SWITCHES. MODIFY EXISTING BRANCH CIRCUIT WIRING TO PROVIDE UNSWITCHED POWER TO ALL FIXTURES. INSTALL NEW 0-10V DIMMER. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. DIMMER: SENSOR SWITCH "SPOOM-D" SERIES. | ⑥ | POWER PACK: SENSOR SWITCH "PP-20" SERIES.

REMOVE EXISTING CONTROL SWITCH. INSTALL NEW DUAL-TECH WALL OCCUPANCY SENSOR WITH INTEGRAL 0-10V DIMMING. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. OCCUPANCY SENSOR/DIMMER: SENSOR SWITCH "WSX-PDT-D" SERIES. |



1 ENLARGED FLOOR PLAN — LIGHTING
E4.1 SCALE: 1/8" = 1'-0"

MEI
INC. Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER



B B T

A R C H I T E C T S

1160 sw Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.382.5535 | f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary
20805 Cooley Road
Bend, Oregon 97701

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

SHEET TITLE

ENLARGED
FLOOR PLAN
LIGHTING

SHEET NUMBER

E4.1

Copyright © 2017 MFA Architects
Bend-La Pine Schools Security Upgrades
1140 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.389.8033

GENERAL NOTES

A. ALL EXISTING INTERIOR LIGHTING FIXTURES TO BE REPLACED ONE-FOR-ONE WITH FIXTURE TYPES INDICATED. MODIFY EXISTING BRANCH CIRCUITING AS REQUIRED TO CONNECT NEW LIGHTING FIXTURES AND CONTROLS.

PLAN NOTES

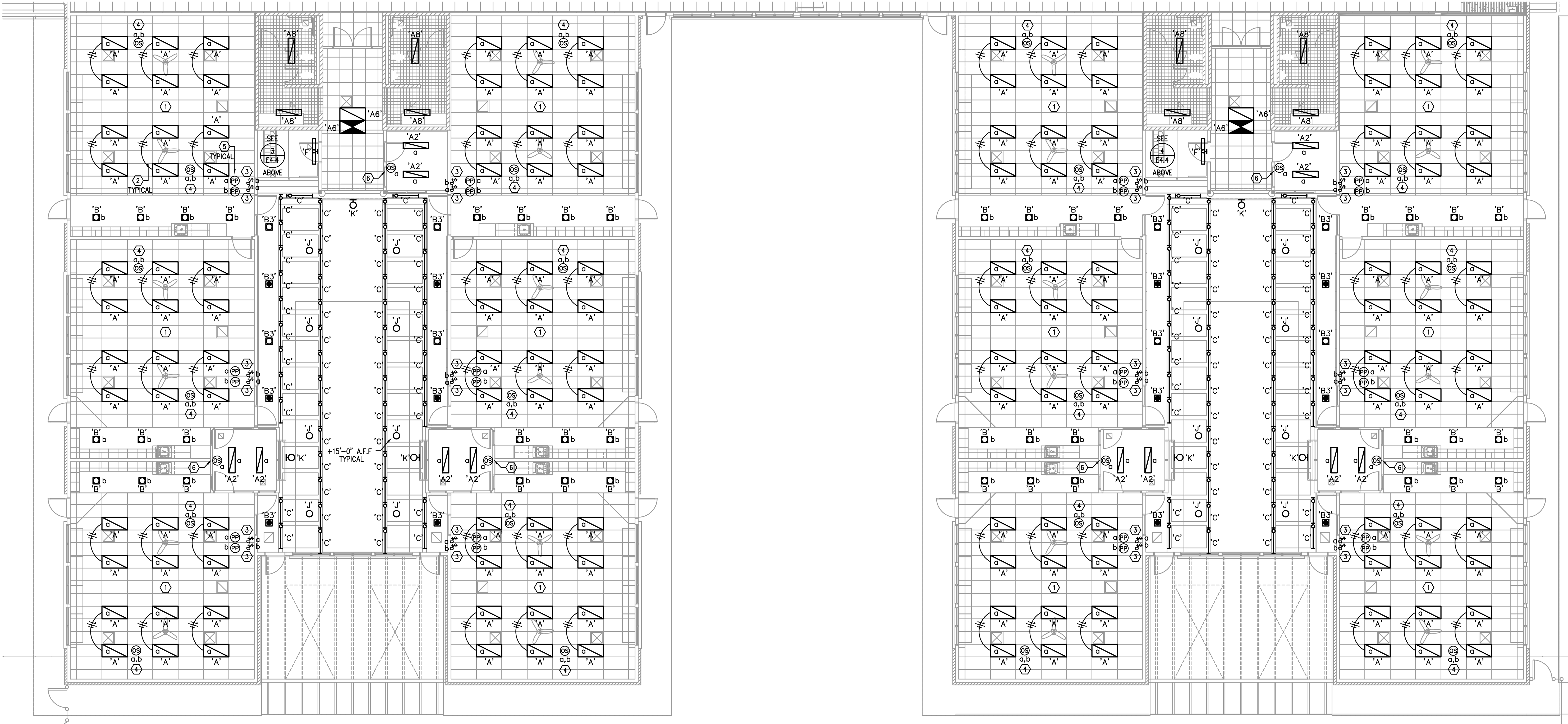
- 1 BRANCH CIRCUIT WIRING IN THIS ROOM CONSIST OF "RELOC" MODULAR WIRING SYSTEM. "RELOC" WIRING SYSTEM TO BE MODIFIED AS REQUIRED TO INTEGRATE NEW LIGHTING FIXTURES AND CONTROLS.

2 PROVIDE BRANCH CIRCUITING TO INTERCONNECT NEW FIXTURES WHERE TANDEM WIRED FIXTURES WERE ORIGINALLY INSTALLED.

3 REMOVE EXISTING CONTROL SWITCHES. MODIFY EXISTING BRANCH CIRCUIT WIRING TO PROVIDE UNSWITCHED POWER TO ALL FIXTURES. INSTALL NEW 0-10V DIMMER. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. DIMMER: SENSOR SWITCH "SPDOM-D" SERIES.
- 4 DUAL-TECH CEILING OCCUPANCY SENSOR. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. OCCUPANCY SENSOR: SENSOR SWITCH "CM-PDT-9" SERIES.

5 CONTROLS POWER PACK. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. POWER PACK: SENSOR SWITCH "PP-20" SERIES.

6 REMOVE EXISTING CONTROL SWITCH. INSTALL NEW DUAL-TECH WALL OCCUPANCY SENSOR WITH INTEGRAL 0-10V DIMMING. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. OCCUPANCY SENSOR/DIMMER: SENSOR SWITCH "WSX-PDT-D" SERIES.



1 ENLARGED FLOOR PLAN - LIGHTING
E4.2 SCALE: 1/8" = 1'-0"

MFA
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFA-ENG.COM
CONTACT: CHRIS WINER



B B T
ARCHITECTS
1140 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.389.8033

**Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary**
20805 Cooley Road
Bend, Oregon 97701

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

SHEET TITLE
ENLARGED FLOOR PLAN LIGHTING

SHEET NUMBER
E4.2

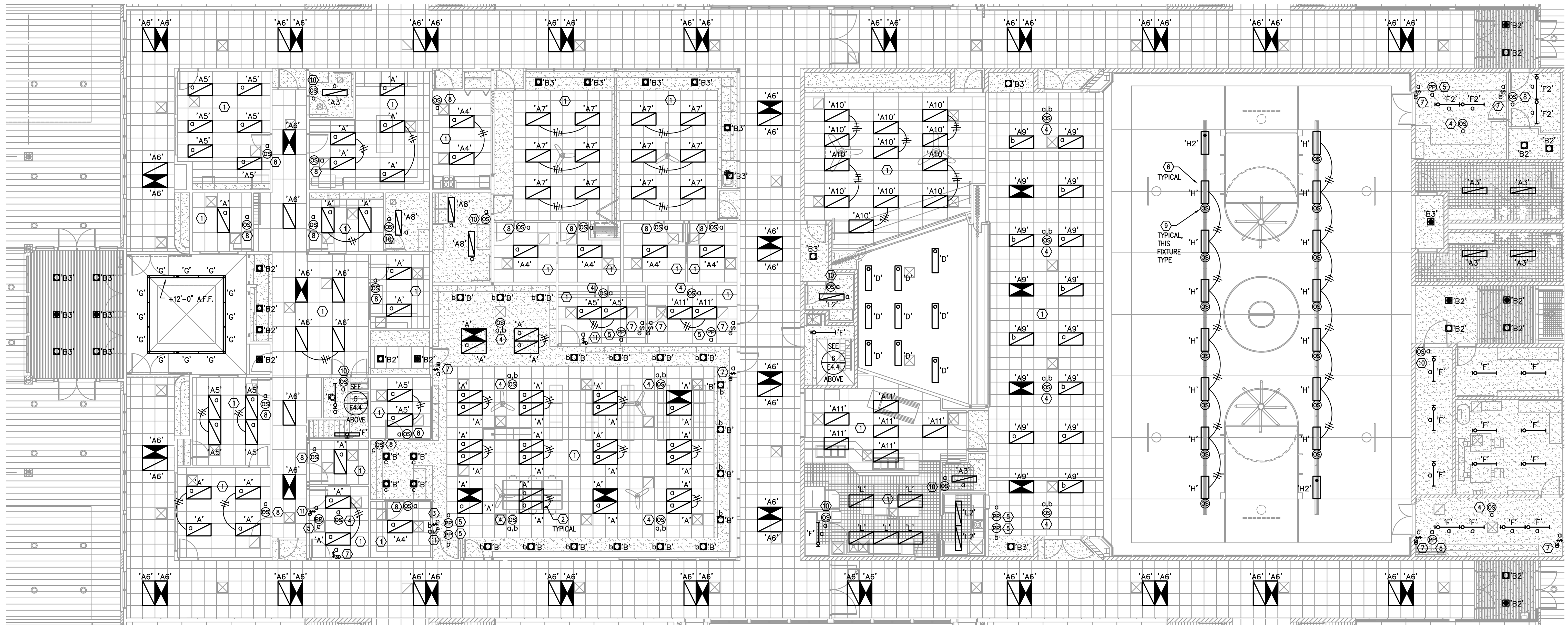
Copyright © 2017 M.F. Inc. All rights reserved. No part of this document may be reproduced without written permission from M.F. Inc. All other rights reserved. 1/14/18

GENERAL NOTES

A. ALL EXISTING INTERIOR LIGHTING FIXTURES TO BE REPLACED ONE-FOR-ONE WITH FIXTURE TYPES INDICATED. MODIFY EXISTING BRANCH CIRCUITING AS REQUIRED TO CONNECT NEW LIGHTING FIXTURES AND CONTROLS.

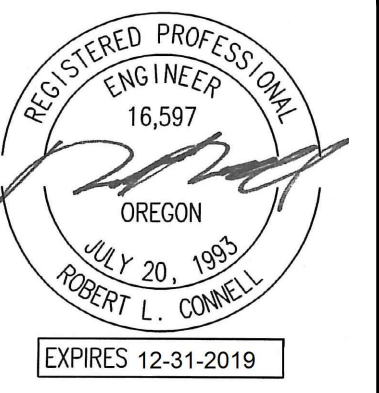
PLAN NOTES

- ① BRANCH CIRCUIT WIRING IN THIS ROOM CONSIST OF "RELOC" MODULAR WIRING SYSTEM. "RELOC" WIRING SYSTEM TO BE MODIFIED AS REQUIRED TO INTEGRATE NEW LIGHTING FIXTURES AND CONTROLS.
- ② PROVIDE BRANCH CIRCUITING TO INTERCONNECT NEW FIXTURES WHERE TANDEM WIRED FIXTURES WERE ORIGINALLY INSTALLED.
- ③ REMOVE EXISTING CONTROL SWITCHES. MODIFY EXISTING BRANCH CIRCUIT WIRING TO PROVIDE UNSWITCHED POWER TO ALL FIXTURES. INSTALL NEW 0-10V DIMMER. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. DIMMER: SENSOR SWITCH "SP0DM-D" SERIES.
- ④ DUAL-TECH CEILING OCCUPANCY SENSOR. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. OCCUPANCY SENSOR: SENSOR SWITCH "CM-PDT-9" SERIES.
- ⑤ CONTROLS POWER PACK. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. POWER PACK: SENSOR SWITCH "PP-20" SERIES.
- ⑥ MOUNT FIXTURE ON EXISTING STRUT SUPPORT.
- ⑦ REMOVE EXISTING CONTROL SWITCH. INSTALL MULTI-WAY CONTROL SWITCH. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. MULTI-WAY SWITCH: SENSOR SWITCH "SP0DM-3X" SERIES.
- ⑧ REMOVE EXISTING CONTROL SWITCH. INSTALL NEW DUAL-TECH WALL OCCUPANCY SENSOR WITH INTEGRAL 0-10V DIMMING. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. OCCUPANCY SENSOR/DIMMER: SENSOR SWITCH "WSX-PDT-D" SERIES.
- ⑨ OCCUPANCY SENSOR PROVIDED WITH LIGHTING FIXTURE.
- ⑩ REMOVE EXISTING CONTROL SWITCH. INSTALL NEW SINGLE-RELAY DUAL-TECH WALL OCCUPANCY SENSOR. OCCUPANCY SENSOR: SENSOR SWITCH "WSX-PDT" SERIES.
- ⑪ REMOVE EXISTING CONTROL SWITCHES. MODIFY EXISTING BRANCH CIRCUIT WIRING TO PROVIDE UNSWITCHED POWER TO ALL FIXTURES. INSTALL NEW 0-10V DIMMER. INSTALL CONTROL CABLE PER MANUFACTURERS REQUIREMENTS TO CONTROL FIXTURES AS INDICATED. DIMMER: SENSOR SWITCH "SP0DM-3X-D" SERIES.



1 ENLARGED FLOOR PLAN - LIGHTING
E4.3 SCALE: 1/8" = 1'-0"

M
F
I
N
C.
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER



B B T
A R C H I T E C T S
1140 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES
Lava Ridge Elementary
20805 Cooley Road
Bend, Oregon 97701

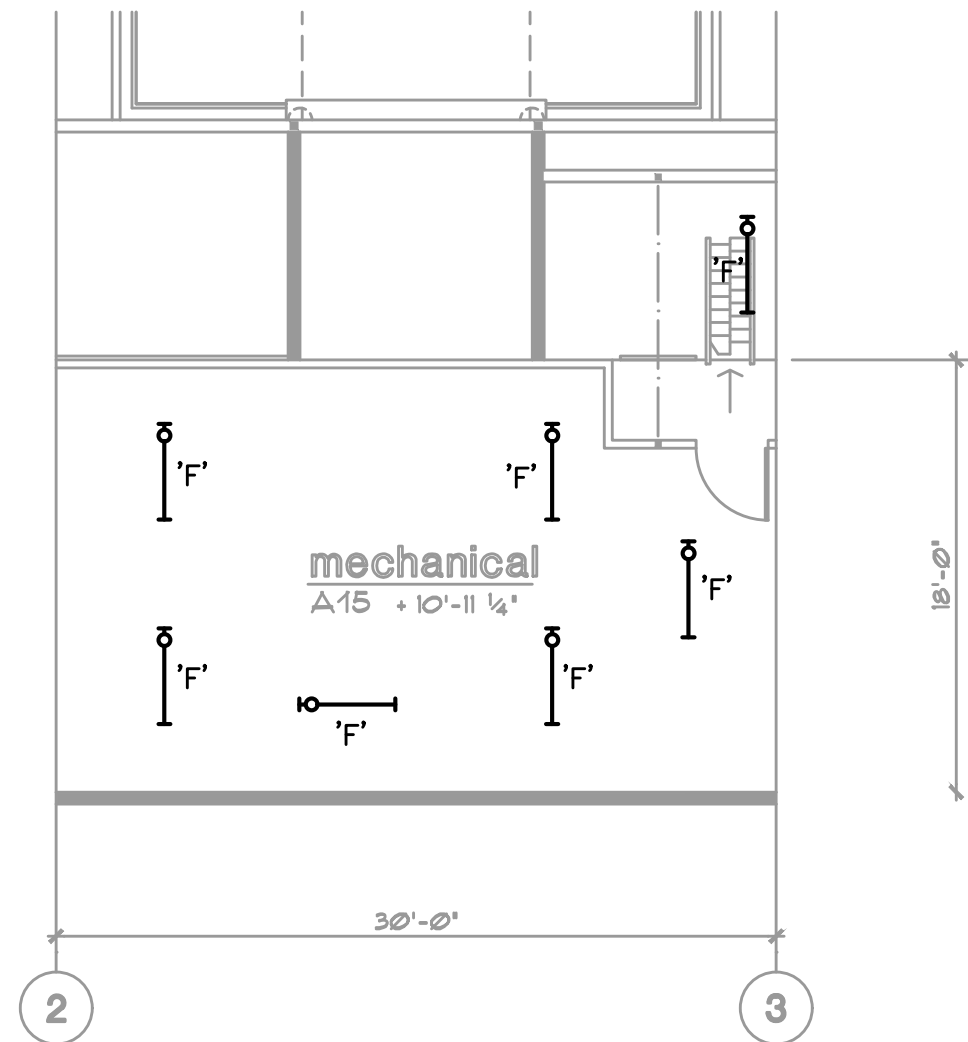
ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

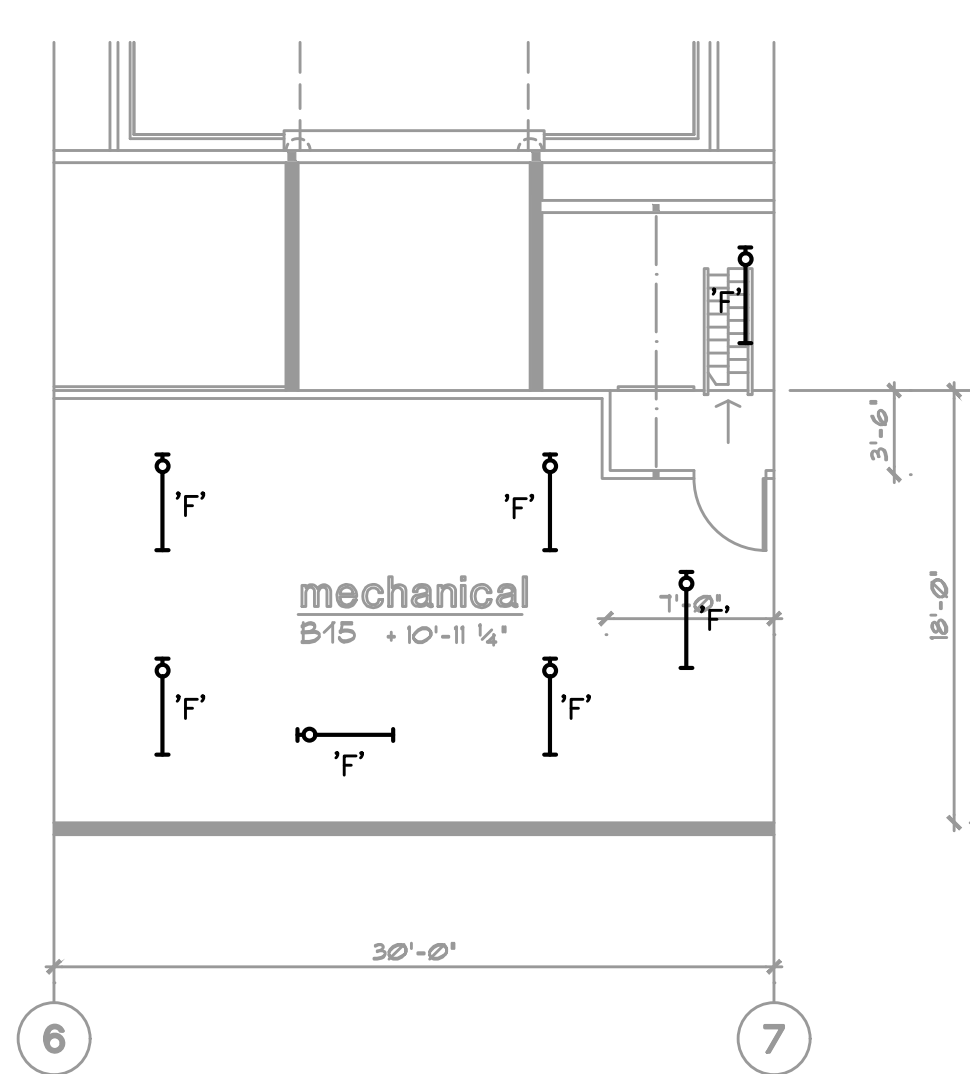
SHEET TITLE
ENLARGED
FLOOR PLAN
LIGHTING

SHEET NUMBER
E4.3

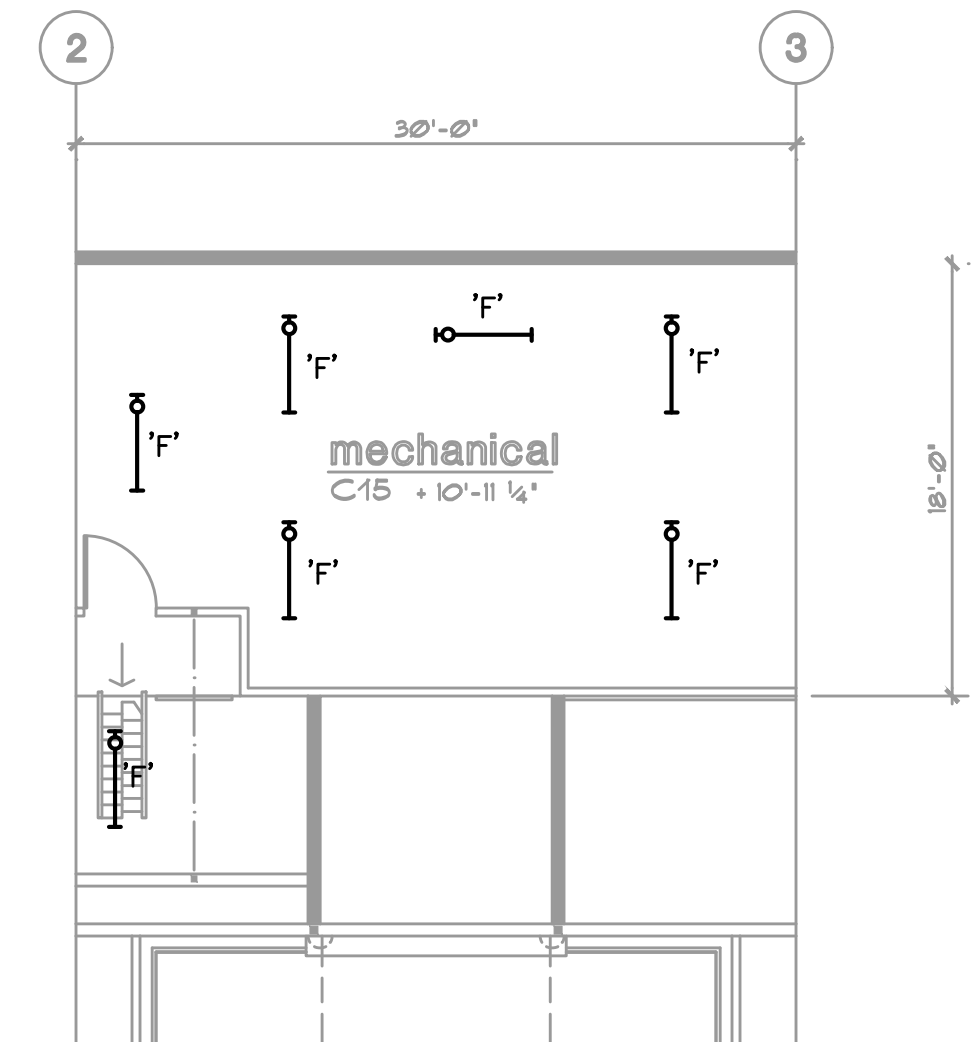
A. ALL EXISTING INTERIOR LIGHTING FIXTURES TO BE REPLACED ONE-FOR-ONE WITH FIXTURE TYPES INDICATED. MODIFY EXISTING BRANCH CIRCUITING AS REQUIRED TO CONNECT NEW LIGHTING FIXTURES.



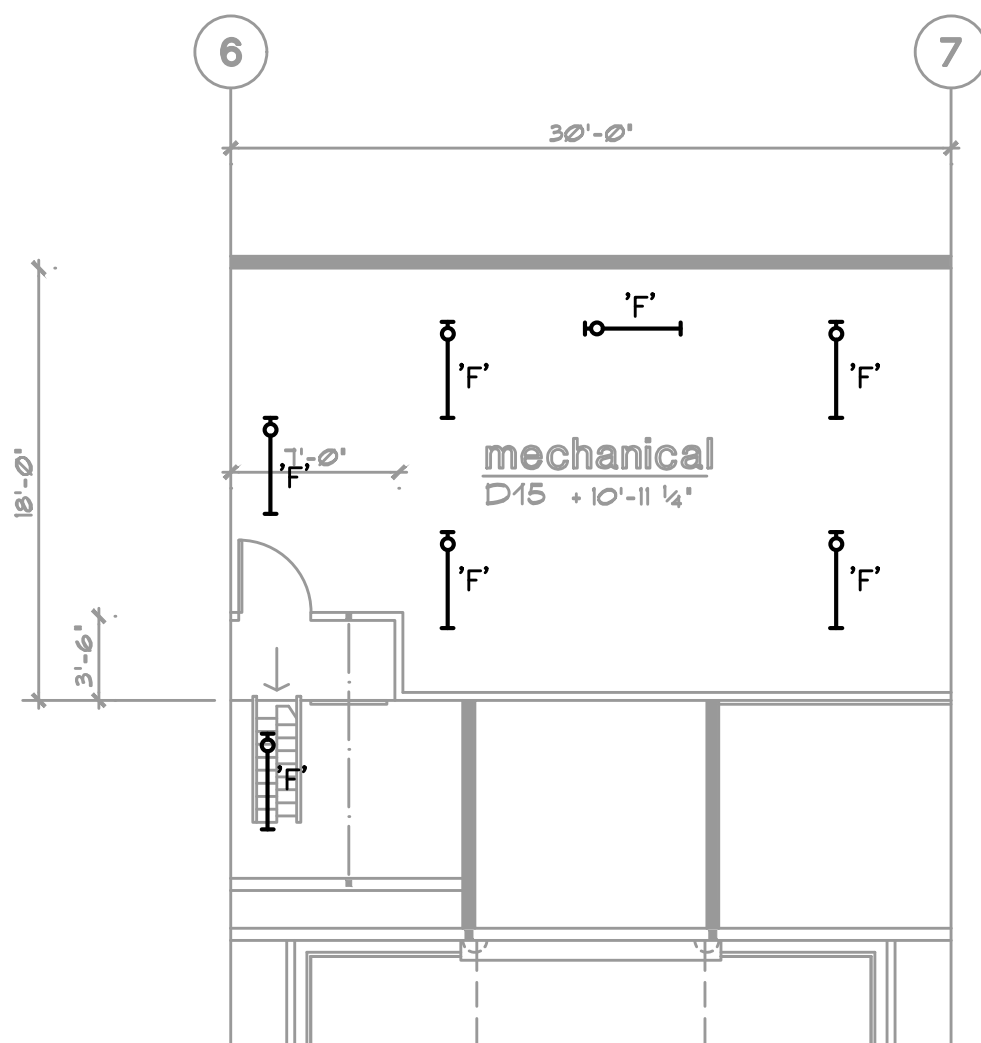
1 ENLARGED MECHANICAL LOFT PLAN - LIGHTING
E4.4 SCALE: 1/8" = 1'-0"



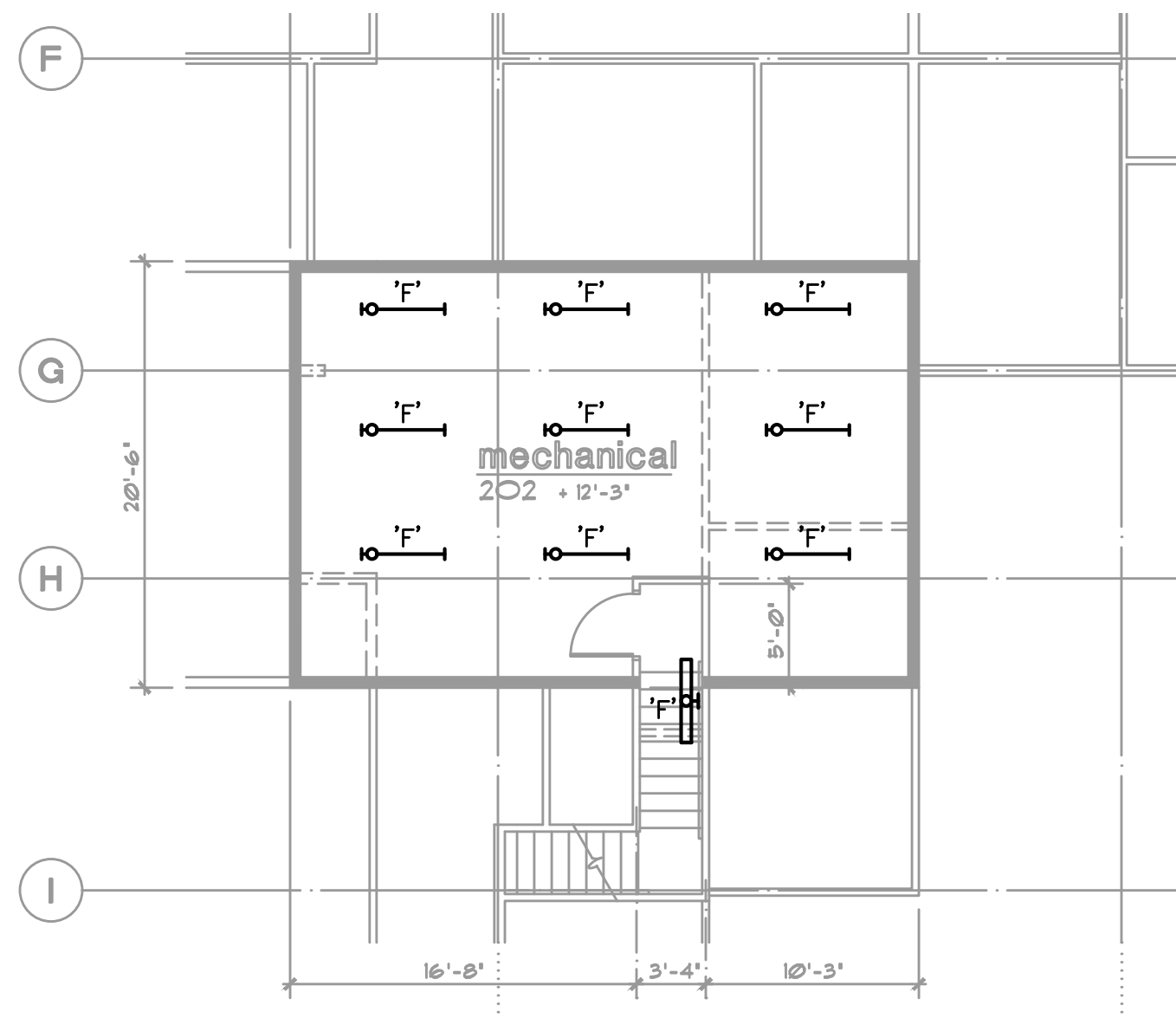
2 ENLARGED MECHANICAL LOFT PLAN – LIGHTING
E4.4 SCALE: 1/8" = 1'-0"



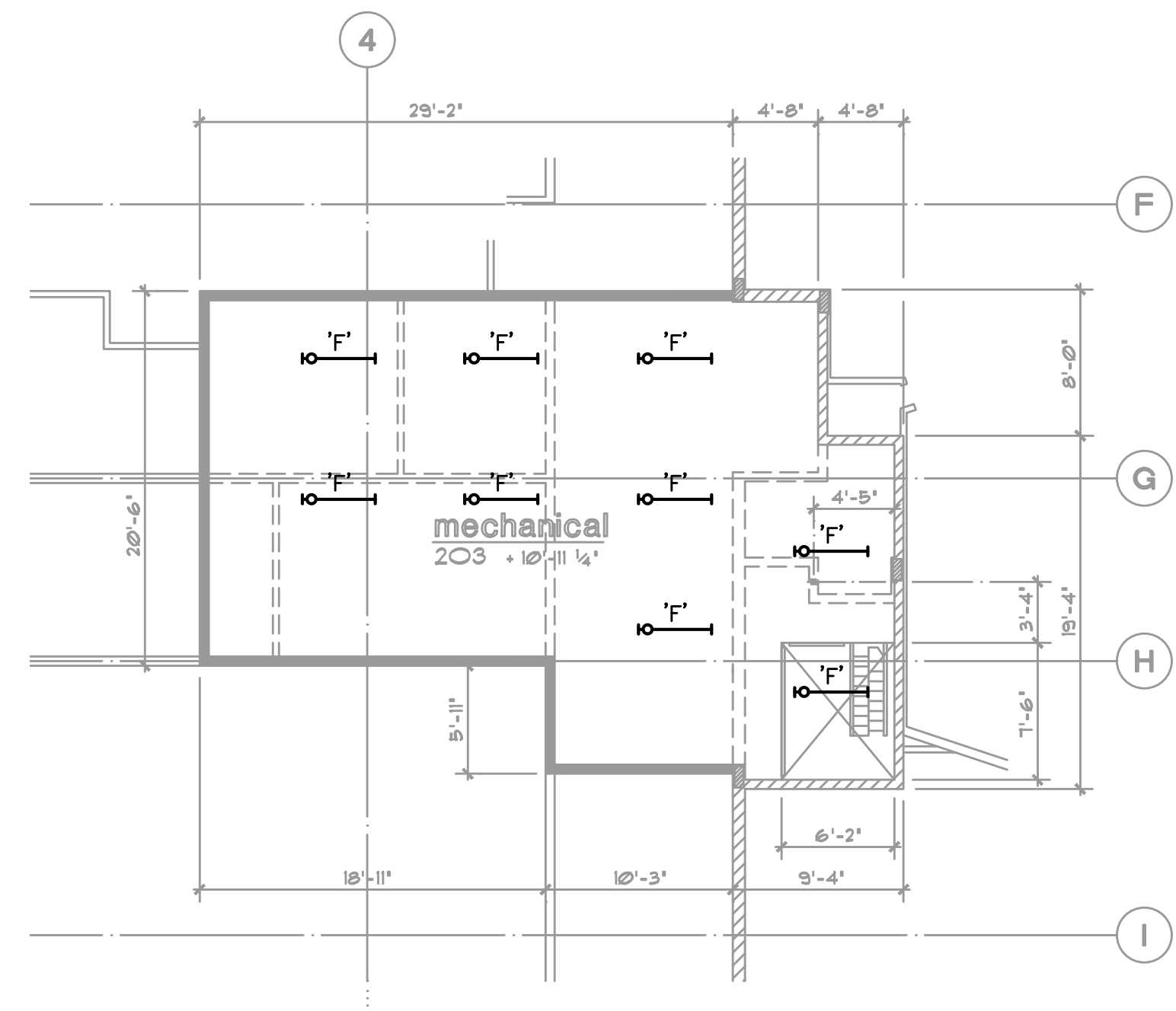
3 E4.4 ENLARGED MECHANICAL LOFT PLAN – LIGHTING SCALE: 1/8" = 1'-0"



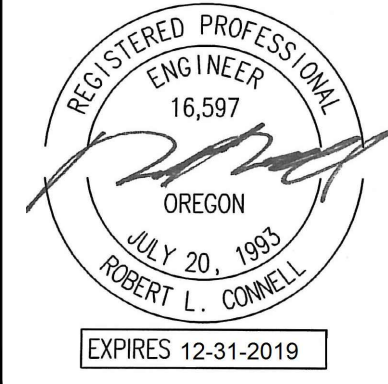
4 ENLARGED MECHANICAL LOFT PLAN - LIGHTING
E4.4 SCALE: 1/8" = 1'-0"



5 ENLARGED MECHANICAL LOFT PLAN – LIGHTING
E4.4 SCALE: 1/8" = 1'-0"



6 ENLARGED MECHANICAL LOFT PLAN – LIGHTING
E4.4 SCALE: 1/8" = 1'-0"



B B T

A R C H I T E C T S

1160 av Simpson Ave. - Suite 100 - Bend, Oregon 97702
t 541.382.5535 f 541.389.8033

Bend-La Pine Schools SECURITY UPGRADES Lava Ridge Elementary

**20805 Cooley Road
Bend, Oregon 97701**

ISSUED:	DATE:
PERMIT SET / BID SET	02/14/18

JOB NUMBER:	1708
DRAWN BY:	CAW
CHECKED BY:	RLC

ENLARGED
LOFT PLANS
LIGHTING

E4.4

**M
F
A
INC.** Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0548
FAX: (503) 234-0677
WWW.MFIA-ENG.COM
CONTACT: CHRIS WINER