December 9, 2019

Mr. John Mannix
Assistant Superintendent, Operations
Monroe School District
200 East Fremont
Monroe, WA 98272

**RE: Comprehensive Light Fixture Survey**
**Sky Valley Educational Center**
**351 Short Columbia Street**
**Monroe, Washington**

Dear Mr. Mannix:

PBS Engineering and Environmental, Inc. (PBS) performed a comprehensive light fixture survey at the Sky Valley Educational Center (SVEC) located at 351 Short Columbia Street, Monroe, Washington. The following report discusses methodology and findings.

## METHODOLOGY

PBS was requested to conduct a light fixture ballast survey at the Sky Valley Educational Center. From October 28 to November 20, 2019, PBS inspected every light fixture on campus, excluding the two Portables east of the Classroom Pod Building. By inspecting each fixture, PBS was able to determine the following:

- What kind of bulb is used (LED, fluorescent, compact fluorescent, incandescent, High-Pressure Sodium);
- If the light fixture utilizes a ballast and whether it's magnetic or electronic;
- And if the ballast housing shows signs of past or current magnetic ballast failure.

Some types of ballasted light fixtures are known to contain PCBs. Electronic light fixture ballasts do not contain PCBs; however, all magnetic ballasts should be presumed to contain PCBs. All PCB-containing products should be handled in accordance with CFR Title 40 Part 761.

## FINDINGS

PBS surveyed a total of 982 light fixtures. The following is a summary of our investigation findings for the comprehensive light fixture survey. Based on what was observed in the field, PBS created survey location diagrams which are attached.

<u>Administration Building</u>

- Five (5) interior fluorescent fixtures with electronic ballasts that show signs of past failure on ballast housing (oily residue);
- One (1) interior fluorescent fixture with a magnetic ballast that shows no signs of failure;
- Two (2) exterior fluorescent fixtures with magnetic ballasts that show no signs of failure;
- Three (3) exterior high-pressure sodium fixtures with magnetic ballasts that show possible signs of failure.

Annex Building

- Two (2) interior fluorescent fixtures with magnetic ballasts that show no signs of failure.

Gym Building

- Three (3) interior fluorescent fixtures with electronic ballasts that show signs of past failure in ballast housing (oily residue);
- One (1) interior fluorescent fixture with a magnetic ballast that shows signs of failure in ballast housing (oil and smoke residue);
- One (1) interior fluorescent fixture with a magnetic ballast that shows no signs of failure;
- Six (6) exterior high-pressure sodium fixtures with magnetic ballasts that show possible signs of failure (oily residue).

Technology Education Building

- Forty-four (44) interior fluorescent fixtures with electronic ballasts that show signs of past failure in ballast housing (oil and smoke residue);
- One (1) interior fluorescent fixture with a magnetic ballast that shows no signs of failure.

Pod/Library Building

- No issues observed. Fixtures in this building include LED fixtures as well as unballasted fixtures with LED bulbs, compact fluorescent, or incandescent bulbs.

For exact locations, see the attached survey location plans.

Please do not hesitate to contact me if you have any questions regarding this letter report or require additional information.

Sincerely,

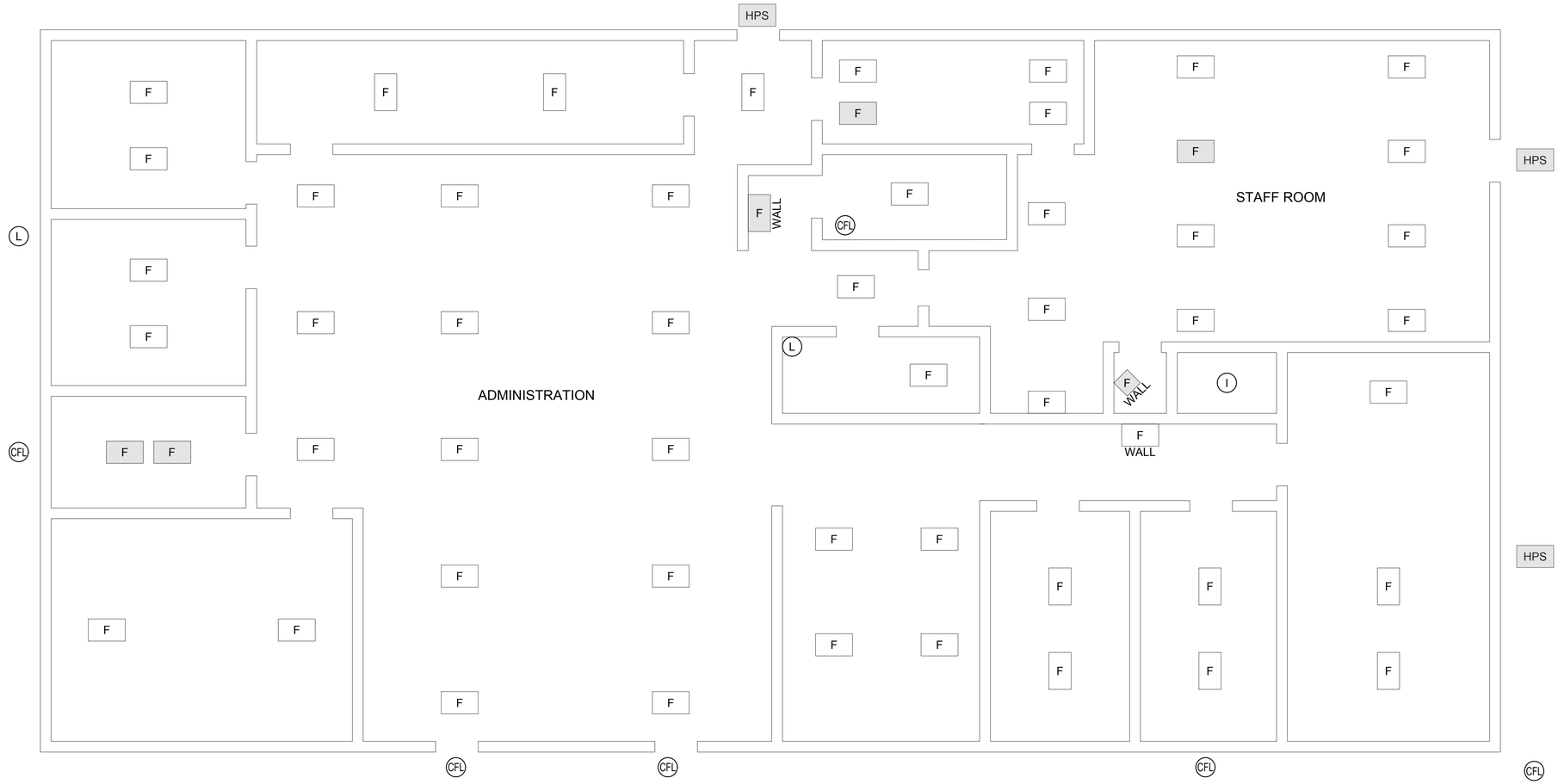
PBS Engineering and Environmental, Inc.

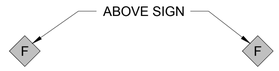
Digitally signed by Kaitlin Soukup

Kaitlin Soukup
Industrial Hygienist

Reviewed by: Gregg Middaugh
Senior Project Manager

Attachments: Survey Location Diagrams



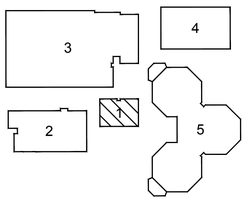




## ADMINISTRATION BUILDING

NOT TO SCALE

### LEGEND

| | |
|---|---|
| F | FLUORESCENT LIGHT (ELECTRONIC BALLAST - NO EVIDENCE OF FAILURE) |
| F | FLUORESCENT LIGHT FIXTURE (SUSPECT OILY/ SMOKE RESIDUE IN HOUSING) |
| CFL | COMPACT FLUORESCENT LIGHT |
| F | FLUORESCENT LIGHT (MAGNETIC BALLAST- NO EVIDENCE OF FAILURE) |
| L | LED LIGHT |
| HPS | HIGH PRESSURE SODIUM LIGHT (SIGNS OF FAILURE) |
| I | INCANDESCENT |




## KEY PLAN

NOT TO SCALE

FULL SIZE SHEET FORMAT IS 22X34; IF PRINTED SIZE IS NOT 22X34, THEN THIS SHEET FORMAT HAS BEEN MODIFIED & INDICATED DRAWING SCALE IS NOT ACCURATE.


PBS Engineering and Environmental Inc.
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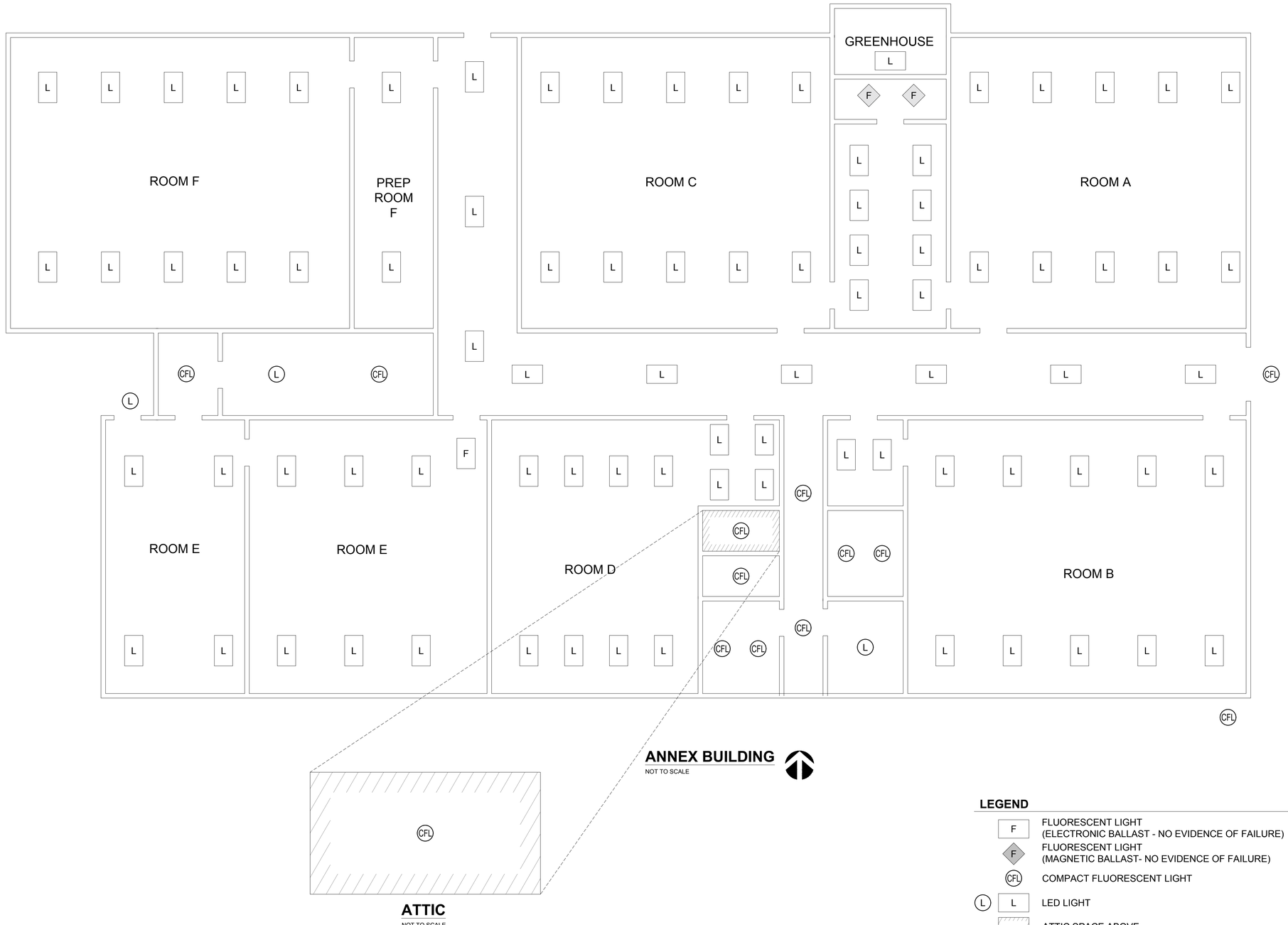
MONROE SCHOOL DISTRICT

# COMPREHENSIVE LIGHT SURVEY PLAN
# SKY VALLEY EDUCATIONAL CENTER
## 351 SHORT COLUMBIA STREET, MONROE, WASHINGTON

| NO | REVISION | DATE | BY | APPD |
|---|---|---|---|---|

DRAWN BY: KJB
CHECKED: KS
DATE: DECEMBER 2019
PROJECT NUMBER: 41373.000
SHEET DRAWING NO: HM1


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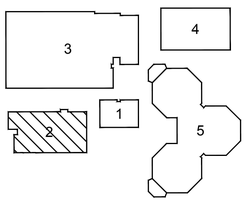

## ANNEX BUILDING
NOT TO SCALE




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NOT TO SCALE

### LEGEND

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| F | FLUORESCENT LIGHT (ELECTRONIC BALLAST - NO EVIDENCE OF FAILURE) |
| F | FLUORESCENT LIGHT (MAGNETIC BALLAST- NO EVIDENCE OF FAILURE) |
| CFL | COMPACT FLUORESCENT LIGHT |
| L | LED LIGHT |
| | ATTIC SPACE ABOVE |




## KEY PLAN
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MONROE SCHOOL DISTRICT

# COMPREHENSIVE LIGHT FIXTURE SURVEY PLAN
# SKY VALLEY EDUCATIONAL CENTER
## 351 SHORT COLUMBIA STREET, MONROE, WASHINGTON

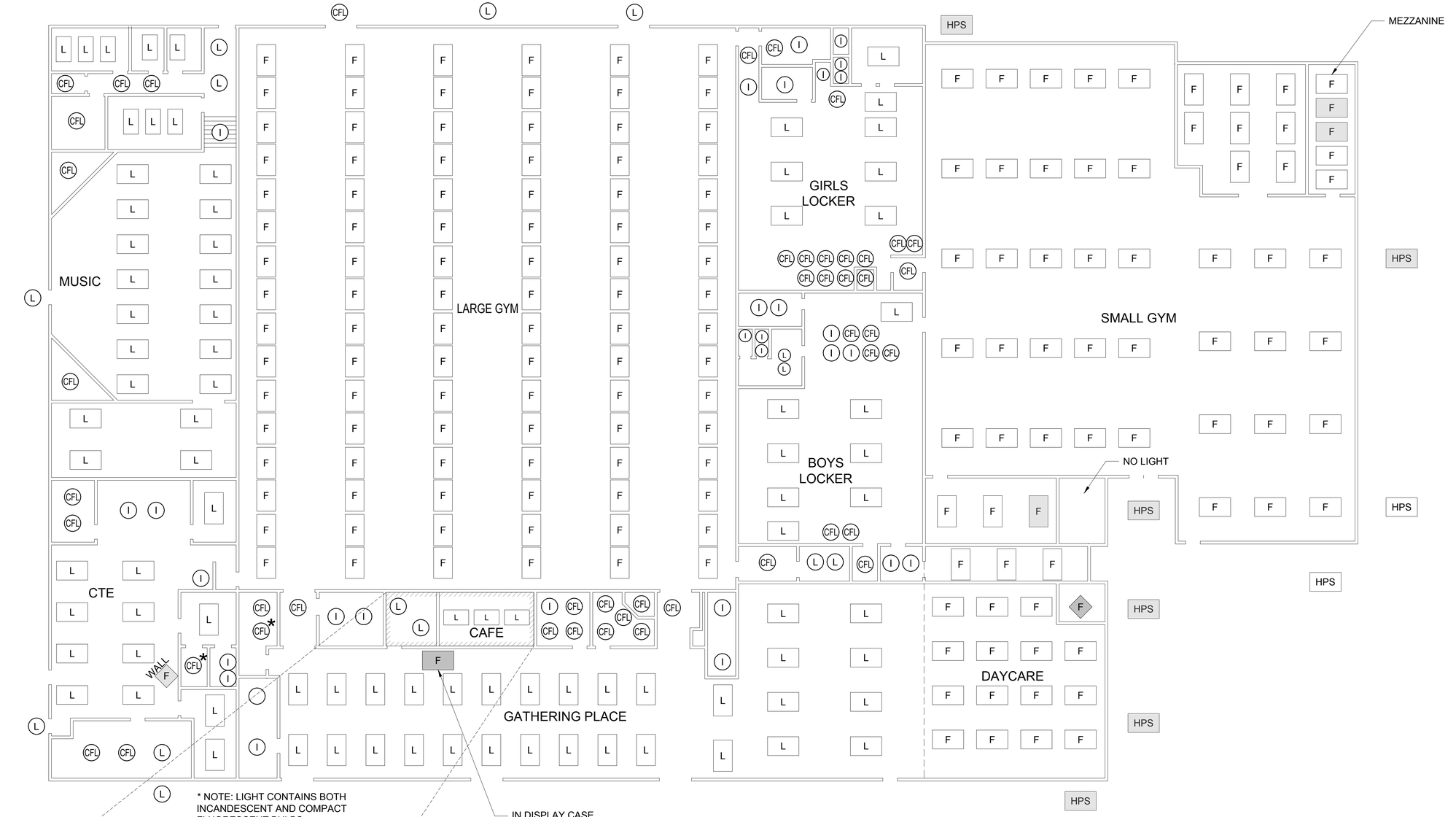
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CHECKED: KS
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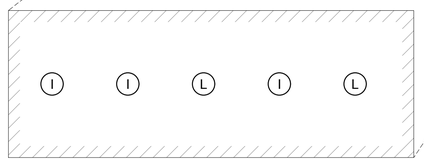
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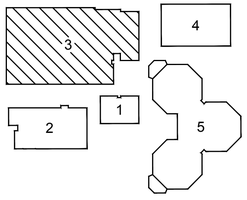

## GYM BUILDING
NOT TO SCALE



## ATTIC ABOVE CAFE
NOT TO SCALE

**LEGEND**

- F — FLUORESCENT LIGHT (ELECTRONIC BALLAST - NO EVIDENCE OF FAILURE)
- F — FLUORESCENT LIGHT FIXTURE (SUSPECT OILY/ SMOKE RESIDUE IN HOUSING)
- F — FLUORESCENT LIGHT (MAGNETIC BALLAST- NO EVIDENCE OF FAILURE)
- CFL — COMPACT FLUORESCENT LIGHT
- L — LED LIGHT
- ATTIC SPACE ABOVE
- HPS — HIGH PRESSURE SODIUM LIGHT (SIGNS OF FAILURE)
- I — INCANDESCENT




## KEY PLAN
NOT TO SCALE

PBS Engineering and Environmental Inc.
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MONROE SCHOOL DISTRICT

# COMPREHENSIVE LIGHT FIXTURE SURVEY PLAN
# SKY VALLEY EDUCATIONAL CENTER
## 351 SHORT COLUMBIA STREET, MONROE, WASHINGTON

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**DRAWN BY** KJB

**CHECKED:** KS

**DATE:** DECEMBER 2019

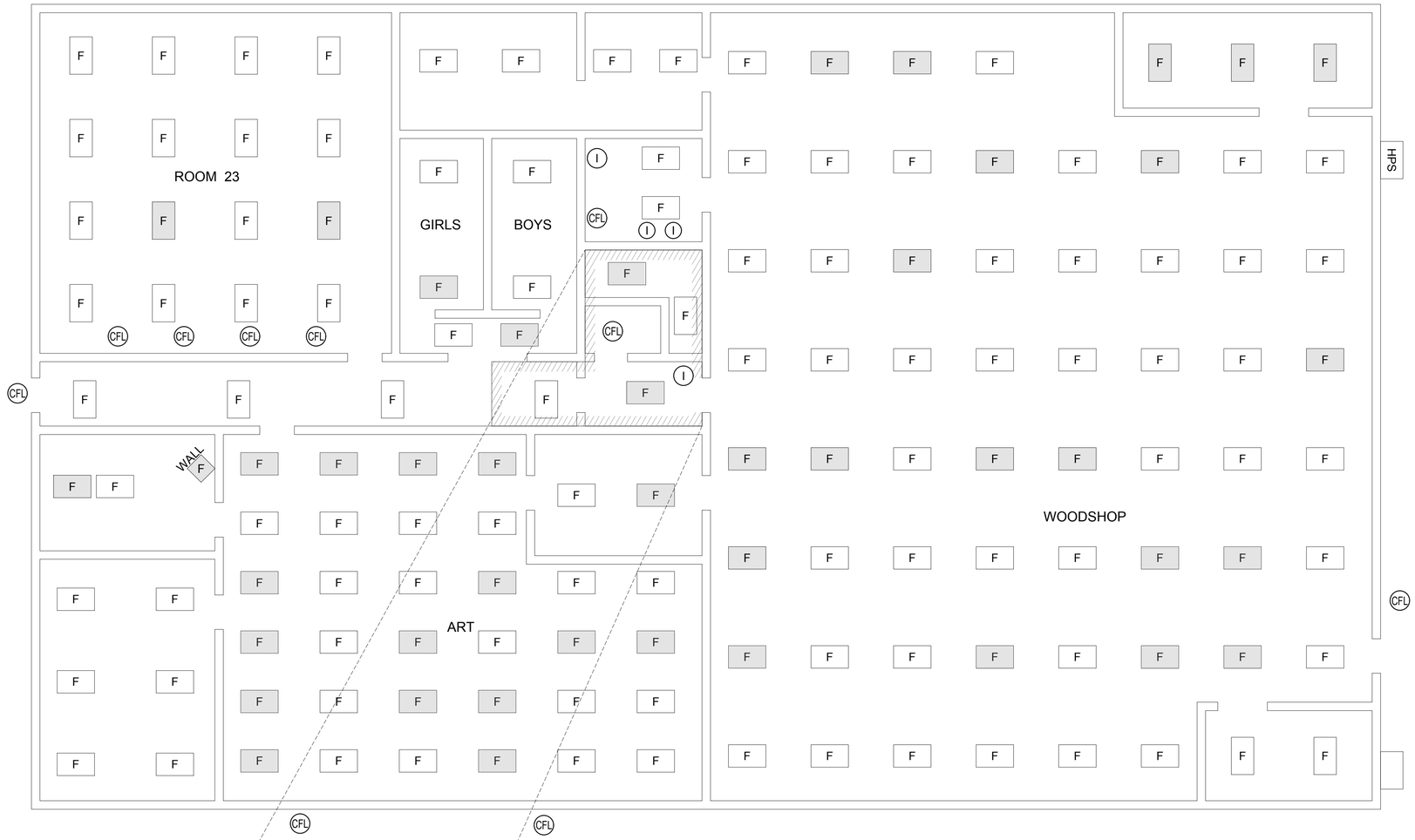
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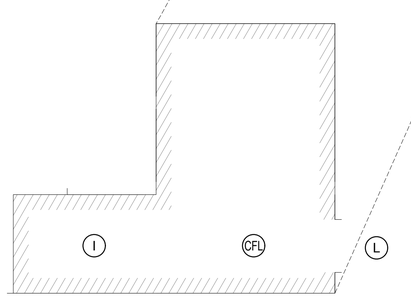
**HM3**

FULL SIZE SHEET FORMAT IS 22X34; IF PRINTED SIZE IS NOT 22X34, THEN THIS SHEET FORMAT HAS BEEN MODIFIED & INDICATED DRAWING SCALE IS NOT ACCURATE.

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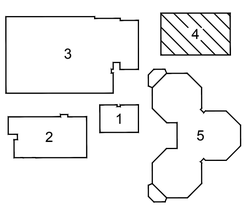

## TECHNOLOGY BUILDING
NOT TO SCALE




## HVAC SPACE
NOT TO SCALE

### LEGEND

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|---|---|
| F | FLUORESCENT LIGHT (ELECTRONIC BALLAST - NO EVIDENCE OF FAILURE) |
| F | FLUORESCENT LIGHT FIXTURE (SUSPECT OILY/ SMOKE RESIDUE IN HOUSING) |
| CFL | COMPACT FLUORESCENT LIGHT |
| F | FLUORESCENT LIGHT (MAGNETIC BALLAST- NO EVIDENCE OF FAILURE) |
| L | LED LIGHT |
| | ATTIC SPACE ABOVE |
| HPS | HIGH PRESSURE SODIUM LIGHT |
| I | INCANDESCENT |




## KEY PLAN
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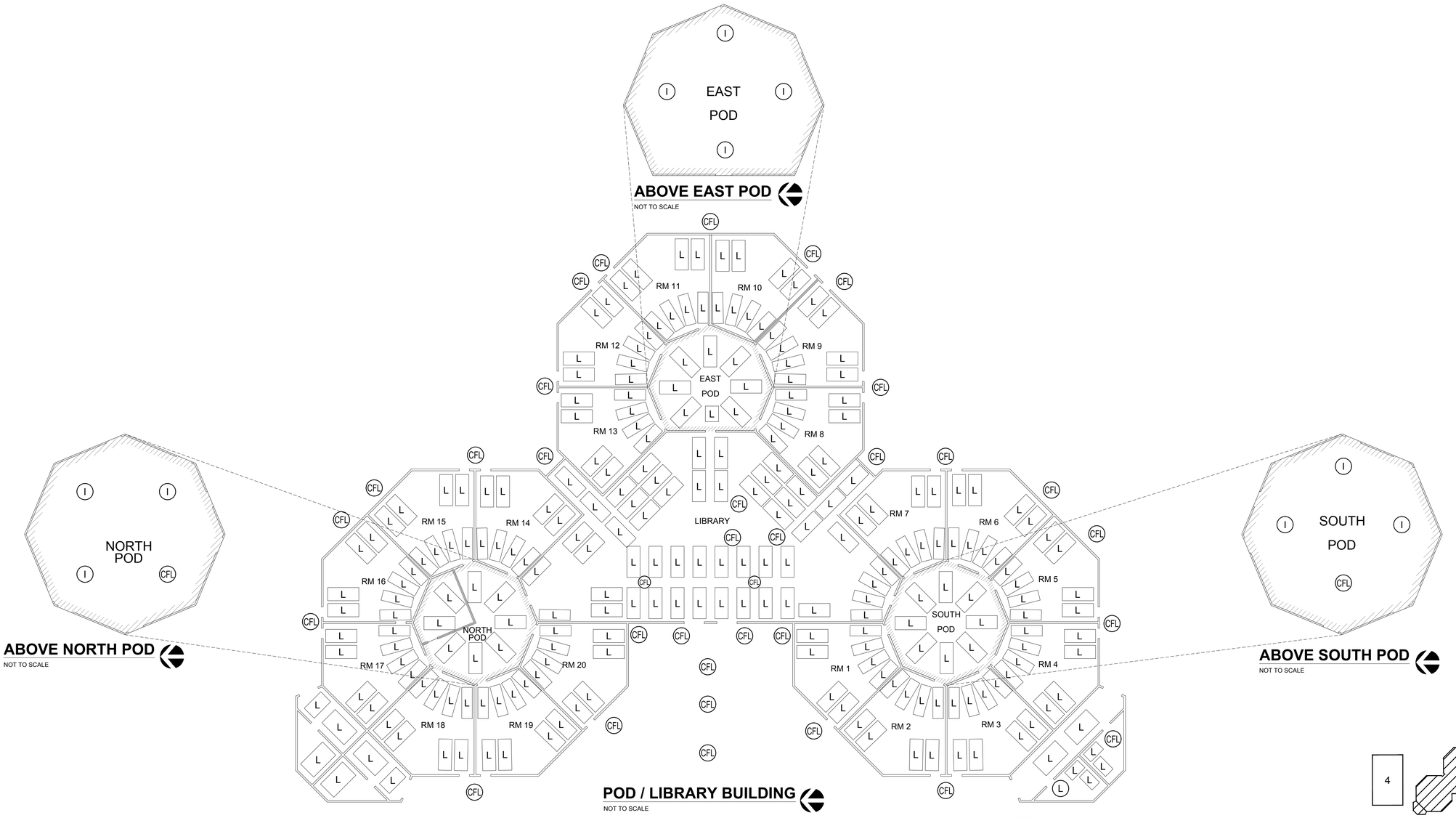
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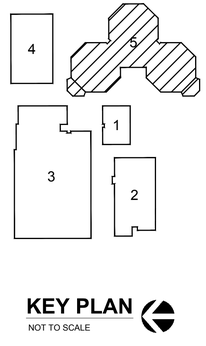
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CHECKED: KS
DATE: DECEMBER 2019
PROJECT NUMBER: 41373.000
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## LEGEND

| | |
|---|---|
| F | FLUORESCENT LIGHT (ELECTRONIC BALLAST - NO EVIDENCE OF FAILURE) |
| CFL | COMPACT FLUORESCENT LIGHT |
| L | LED LIGHT |
| | ATTIC SPACE ABOVE |
| I | INCANDESCENT |




KEY PLAN
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# COMPREHENSIVE LIGHT FIXTURE SURVEY PLAN
# SKY VALLEY EDUCATIONAL CENTER
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CHECKED: KS
DATE: DECEMBER 2019
PROJECT NUMBER: 41373.000

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**HM5**

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