

Operations and Maintenance Plan for Polychlorinated Biphenyls

John F. Kennedy Middle School
Enfield, Connecticut

Town of Enfield
Enfield, Connecticut

November 8, 2017



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November 8, 2017

Mr. Gregg Gabinelle
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**RE: Operations & Maintenance Plan for Polychlorinated Biphenyls
John F. Kennedy Middle School, Enfield, CT**
Fuss & O' Neill EnviroScience Project No. 20170088.A3E

Dear Mr. Gabinelle:

Enclosed please find the Targeted Building Materials Maintenance Plan (the "Plan") for certain materials identified to contain Polychlorinated Biphenyls (PCBs); specifically to exterior and interior window system, vents and louvers caulking and glazing compounds, interior/exterior masonry control joints and PCB containing soils.

The Plan has been reviewed with maintenance staff and should be maintained at a central location available for staff and for vendors who may come in contact with the targeted building materials during maintenance and repair activities. The general intent and purpose of the Plan is to ensure continued health and safety of the building occupants as well as maintenance staff and outside contractors.

Should you have any questions regarding this O&M Program, please do not hesitate to call me at (860) 646-2469 ext. 5570. Thank you for this opportunity to have served your needs.

Sincerely,

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Table of Contents

Polychlorinated Biphenyls Operations & Maintenance Plan John F. Kennedy Middle School, Enfield, CT Town of Enfield

1	Purpose and Overview	1
1.1	Intent	1
1.2	Site Overview	1
2	Project Background	2
3	Roles and Responsibilities	5
3.1	Roles and Responsibilities	5
3.2	John F. Kennedy Middle School Management	5
3.2.1	PCBs Program Coordinator or Designee (EDPW-Facilities) Manager).....	6
3.2.2	Project Manager of Designee (EDPW)	6
3.2.3	Custodial Services Crew Leaders or Designee (EDPW)	6
3.3	Operations and Maintenance Employees	7
3.4	Environmental Consultants and Contractors	7
3.4.1	PCB Inspectors	7
3.4.2	PCB Abatement Contractors	8
3.5	Other Contractors	8
3.5.1	General Contractors	8
3.5.2	Subcontractors	9
4	Program Administration.....	9
4.1	Training Requirements	9
4.1.1	Operations Maintenance Staff and Contractors	9
4.1.2	Hazardous Material Training.....	10
4.2	Hazard Communication.....	10
4.3	Inventory	10
4.4	Incident Reporting	11
4.5	Inspections	11
4.6	Recordkeeping	11
4.7	Program Review and Revision	11
5	PCB Related Activities	12
5.1	PCB Related Activities	12
5.2	Operations and Maintenance Activities	12
5.2.1	Maintenance Activities	12
5.2.2	Housekeeping Activities	13
6	PCB Response Plan	13
6.1	Notification	13
6.2	Isolate the Area.....	13



7 Ventilation Plan 14

8 PCB Air and Surface Sampling Plan 15

8.1 Site Specific Criteria15

8.2 Air Sampling.....15

8.3 Surface Dust Sampling.....16

8.4 Quality Assurance/Quality Control (QA/QC)17

8.5 Record Keeping.....17

Table

Table 1 Summary of Minimum PCB Training Requirements for Personnel 10

Figures

Figure 1 16.136 JFK Middle School- A1-Final PCB Expansion Joint Encapsulation Plan and Details

Figure 2 PCB Air and Wipe Samples – May-June 2017

Figure 3 PCB Air and Wipe Samples – August 2017

Figure 4 PCB Soil Samples – August 2017

Appendices

- APPENDIX A - CONTACT INFORMATION FOR EMPLOYEES
- APPENDIX B - INVENTORY OF IDENTIFIED PCBs
- APPENDIX C - PCB AIR, WIPE, AND SOIL SAMPLING RESULTS
- APPENDIX D - PCB MANAGEMENT PROGRAM REVISION HISTORY
- APPENDIX E - RENOVATION/REMEDIATION ACTIVITY STANDARD OPERATING PROCEDURES
- APPENDIX F - PERIODIC SURVEILLANCE FORMS
- APPENDIX G - RECORD OF PCB AWARENESS TRAINING
- APPENDIX H - AREAS OF THE SCHOOL THAT WILL BE SAMPLED FOR THE YEAR

List of Abbreviations and Acronyms

JFK	John F. Kennedy Middle School
EPA	U.S. Environmental Protection Agency
ng/m ³	Nanograms per cubic meter
O&M	Operations and Maintenance
PCB	Polychlorinated Biphenyl
PM	Project Manager
ppm	Parts per million
SOP	Standard Operating Procedure
µg/100 cm ²	Micrograms per 100 square centimeters
DEEP	Connecticut Department of Energy & Environmental Protection
EDPW	Enfield Department of Public Works
BMPs	Best Management Practices



1 Purpose and Overview

1.1 Intent

The intent of the John F. Kennedy Middle School (JFK Middle School) Operations and Maintenance (O&M) Plan and Best Management Practices (BMPs) for polychlorinated biphenyls (PCBs) is to:

1. Recognize, control, and mitigate potential immediate PCB hazards at JFK Middle School.
2. Ensure the continued health and safety of students, staff, visitors, contractors, vendors, and the community as it related to identified PCB building materials.
3. Comply with occupational and environmental regulations pertaining to PCBs.
4. Implement proactive maintenance activity reviews to identify work and the potential to disturb PCB-containing materials.
5. Provisions to monitor with periodic sampling indoor air and wipe in an effort to maintain indoor air and surface concentrations of PCBs below established EPA health-based guidelines and as low as reasonably achievable until complete remediation of PCBs.
6. Ensure adequate ventilation is provided at the JFK Middle School.
7. Specify environmental sampling schedules and plans.

1.2 Site Overview

This plan describes operations and maintenance procedures for the continued management and control of PCBs at JFK Middle School, Enfield, Connecticut. This plan has been prepared by Fuss & O'Neill EnviroScience, LLC (EnviroScience) for the exclusive use of the Town of Enfield.

The following are the primary intent for the JFK Middle School O&M Plan:

- Potential exposure to airborne PCBs shall be controlled to as low as reasonably achievable, and comply with the current established published limit of 300 ng/m³ PCBs for students between the ages of 6 and 12.
- Potential exposure to PCBs in surface dust shall be controlled to as low as reasonably achievable, and in all cases surface dust PCB concentrations shall comply with the criteria set forth by the U.S. Environmental Protection Agency (EPA) of 10 microgram per 100 cubic centimeters (µg/100 cm²), as well as a more stringent criteria of 1 µg/100 cm² set by the EPA Region 1 PCB Coordinator and DEEP.
- Potential exposure to PCBs on recently encapsulated surfaces (Masonry/CMU Control Joint Caulking) shall be controlled to as low as reasonably achievable, and in all cases comply with creation set forth by EPA Region 1 of 1 µg/100 cm².
- Potential exposure to PCBs in soils shall be controlled by fencing that has been installed at a distance of five feet from the façade to enclose the soils with PCB concentrations above 1 ppm and prevent direct contact with the PCB Bulk Product Waste and CTDEEP PCB regulated

materials associated with the exterior windows and concrete sills at all seven spokes of the school building.

- All projects or work activities that may potentially disturb PCBs shall be evaluated by the Enfield Department of Public Works to determine if precautions are required (e.g., inspection, testing, abatement)
- Only qualified and trained personnel shall perform activities that will potentially disturb PCB-containing materials.
- Enfield Department of Public Works shall be responsible for ensuring that the O&M plan and BMPs is implemented and observed.
- PCB awareness training shall be provided to teachers, staff, and Enfield Department of Public Works employees.
- All JFK Middle School staff, contractors, and vendors are responsible for reporting any condition or activity that could result in the disturbance of PCBs to the Enfield Department of Public Works.
- All accidental disturbances and/or releases of PCBs shall be reported immediately to the Enfield Department of Public Works for evaluation and follow up.

The following sections describe the PCB management program and BMPs for JFK Middle School.

Appendix A provides a listing of current key Enfield Department of Public Works employees with responsibilities under this O&M Plan and their contact information. *Appendix B* includes an inventory summary of identified materials that contain PCBs at JFK Middle School.

2 Project Background

EnviroScience conducted a Feasibility Study-Limited Hazardous Building Materials Inspection at the Subject school in support of major renovations planned to start in the summer of 2019. The services were performed on March 29, 2017 and from April 10 through April 14, 2017. We conducted sampling for PCBs in caulking and glazing in accordance with current DAS policy for school construction of the interior and exterior of the school. We identified caulking and glazing's in exterior windows, doors, louvers, expansion joints, and vents to contain PCBs >50 PPM and <50 PPM. We also identified interior caulking and glazing in the interior partition windows, masonry/CMU control joints and interior window that contain PCBs >50 PPM and <50 PPM.

Based on the analytical results for the identified interior source materials, PCB Bulk Product source materials are present within the interior and exterior of the original JFK Middle School building with reported concentrations above 50 ppm. EnviroScience recommended collection of indoor air samples within the original JFK School to assess the presence of PCBs within the indoor air, and collection of indoor wipe samples from horizontal surfaces (i.e. desks, window sills, shelves etc) within the original JFK School to assess the presence of PCBs present on the horizontal surfaces.

Three different types of exterior caulking compounds were observed along the perimeter of the exterior window frames and one type of exterior glazing compound was identified the JFK Middle School. Two additional types of exterior caulking were observed within the masonry joint between the pre-cast concrete sills and the exterior brick façade wall. All three types of caulking contained PCB concentrations between greater than 1 ppm and 50,000 ppm.

Three different types of caulking compounds were identified at the exterior door frames throughout the original JFK building. All three types of caulking contained PCB concentrations between greater than 1 ppm and 5.8 ppm.

One type of caulking was observed at exterior louvers and vents throughout the exterior brick façade of the original JFK Middle School building. The caulking observed at the perimeter of the louvers and vents was consistent with Type A observed at the exterior windows. The caulking contained PCB concentrations between greater than 1 ppm and 5.8 ppm.

Two different types of caulking were identified within the exterior expansion joints throughout the exterior brick façade of the original JFK Middle School building. The predominant type of caulking, described as ½", light grey/off-white soft, flexible caulking was observed at each of the expansion joints throughout the building. A second type described as white/light grey, hard and heavily weathered was observed buried within an isolated expansion joint behind the predominant type at one location. All two types of caulking contained PCB concentrations between 11,000 ppm and 79,000 ppm.

One type of caulking was observed within interior masonry joints of the brick and glazed block hallway walls. Interior masonry joint caulking was also observed along interior partition doors and adjacent to concrete pillars. The caulking contained PCB concentrations between 76,000 ppm and 110,000 ppm.

One type of interior window caulking was identified along the interior perimeter of the exterior windows throughout the original JFK Middle School building. The caulking contained PCB concentrations between 4 ppm and 25 ppm.

We conducted initial Air and Wipe sampling on May 24-25, 2017, and conducted confirmatory Air sampling on June 2 and June 23, 2017. We have established published limit of 300 ng/m³ PCBs for students between the ages of 6 and 12 in schools. We collected 46 indoor air samples in our initial sampling event, and analyzed 42 samples including a blank. The school was occupied (Summer Conditions) and open during our initial Air and Wipe sampling. Based on the analytical results for the initial round of indoor air sampling, 1 exceedance above the published limit of 300 ng/m³ PCBs for students between the ages of 6 and 12 was reported at a concentration of 357 ng/m³ PCBs within the boys' locker room

Ten (10) additional confirmatory indoor air samples were collected on June 23, 2017 to provide additional indoor air data following review of the analytical results from the initial round of sampling. Two indoor air samples were collected at five pre-designated representative locations. One indoor air sample for each location was packaged, labeled, and sent to ConTest Analytical Laboratories of East Longmeadow, MA and the second indoor air sample for each location was packaged, labeled, and sent to Phoenix Laboratories of Manchester, CT. Two air samples were collected within the 2nd floor hallway of the blue wing, 1 sample contained concentrations of PCB homologs at 422 ng/m³ PCBs

within the hallway of the blue wing exceeding the published limit of 300 ng/m³ PCBs for students between the ages of 6 and 12. Masonry/CMU Control joints are predominately present in hallways of the school. A total of 24 air samples were collected within the hallways in two sampling rounds. The hallway is not a classroom where students spend a good portion of the day in. The hallway is used to travel from established classrooms within the school. Samples in the hall way were taken because of the masonry/CMU control joints caulking throughout the hall ways. Two set of five quality control side by side comparison samples were taken and analyzed by two different labs. The conditions during the additional sampling were slightly different, there were no students in the school, and the school was closed.

We also collected hexane wipes from various surfaces as part of the initial indoor air sampling events on May 24-25, 2017. Hexane wipe samples were collected from window sills associated with exterior window PCB caulking compound and flooring located directly beneath the interior masonry wall caulk joints. Additional hexane wipe samples were collected from targeted horizontal surfaces within food preparation areas to include the kitchen and Food Labs (Rooms 36 and 37). Eight hexane samples were collected from window sills in classrooms, offices and various spaces throughout the school. Five hexane wipe samples collected from the window sills within the administrative wing, white wing and blue wing were reported above EPA suggested guidance concentration of 1 µg/100 cm² threshold with reported concentrations of 1.1, 1.1, 1.2, 1.3 and 1.4 µg/100 cm². Five hexane samples were collected from the base of the masonry/CMU control joints in the hallway throughout the school. One (1) hexane wipe sample collected from the base of the masonry/CMU control joints (floor sample) was reported above EPA suggested guidance concentration of 1 µg/100 cm² threshold with reported concentrations of 1.1 µg/100 cm².

Thirty-three (33) additional hexane wipes from all entry and egress surfaces were collected on August 23, 2018. Five hexane wipe samples collected from the floor surface on the entry doors within the yellow wing, green wing, central hub, red wing and blue wing were reported above EPA suggested guidance concentration of 1 µg/100 cm² threshold with reported concentrations of 1.1, 1.1, 9.7, 1.2 and 4.2 µg/100 cm².

In summary, we analyzed 52 air samples, and 54 hexane settled dust samples throughout the school, with 2 air samples with exceedance of the published limit of 300 ng/m³ PCBs. None of the representative air samples analyzed from any of the classrooms exceeded the published limit of 300 ng/m³ PCBs. We analyzed **54** hexane settled dust samples and **11** samples were reported above EPA suggested guidance concentration of 1 µg/100 cm² threshold.

On August 23, 2017 and August 24, 2017, EnviroScience Technicians performed a preliminary round of characterization sampling of soils immediately at the base of the façade beneath exterior windows where PCB source materials were identified and at distances of three feet from the façade, five feet from the façade and ten feet from the facade. Analytical results for the preliminary characterization soil sampling of surface soils at the base of the facade indicated that PCBs were present in the soils at the base of the façade beneath exterior windows scheduled for replacement as part of the planned demolition and renovation project anticipated to be performed in the summer of 2019.

Collection of the surficial preliminary characterization soil at a depth of 0-3 inches below grade surface (bgs) without hand tools was permissible due to the loose, un-compacted nature of the surface soils.

No hardscape or adjacent substrate (i.e. concrete, asphalt, brick) samples were collected as part of the round of preliminary characterization samples.

PCB-Contaminated soils have been identified at various locations around the perimeter of the original JFK Middle School building based on the analytical results from the preliminary soil sampling. Analytical results for the preliminary soil sampling are provided in Table 1.

Soils containing concentrations of PCBs above 1 ppm and below 50 ppm have been identified within the landscapes areas along the perimeter of the original JFK Middle School building. These soils are subject to EPA and CTDEEP PCB regulations for removal, excavation, stockpiling, and disposal.

Based on the analytical results for the preliminary round of characterization surficial soil samples collected at the immediate base of the façade and distance of three and five feet from the exterior façade, PCBs are not present in concentrations triggering a Significant Environmental Hazard (SEH) requiring notification to the CTDEEP at the specific locations sampled during the preliminary characterization soil sampling event. Please refer to *Appendix C* for a list of sampling results.

3 Roles and Responsibilities

3.1 Roles and Responsibilities

The O&M Plan and BMPs applies to the John F. Kennedy Middle School located at 155 Raffia Road in Enfield, Connecticut. This plan applies to the following type of work:

1. Planned Renovations Projects. (Minor Work Only-Major work requires Remedial Plan)
2. Minor In-house repairs, maintenance, and remodeling work that may disturb PCBs.
3. O&M activities to maintain encapsulated PCBs in acceptable condition.
4. Disposal of PCBs, if necessary

3.2 John F. Kennedy Middle School Management

The Enfield Department of Public Works recognizes that clearly defining the departmental roles and responsibilities, including mechanisms to track the various program elements, are critical to the success of the O&M Plan and BMPs. Enfield Department of Public Works has the responsibility of notifying all employees, contractors and vendors who may work in area with PCBs that these materials are present and managed as part of this O&M Plan.

The following sections outline Enfield Department of Public Works, O&M employees, and contractor roles and responsibilities under this program; current Enfield Department of Public Works personnel listed in *Appendix A*.

3.2.1 PCBs Program Coordinator or Designee (EDPW-Facilities Manager)

The PCBs Program Coordinator or his/her designee has the following responsibilities:

1. Audit compliance with Enfield Department of Public Works policies and state and federal regulations pertaining to PCBs.
2. Conduct annual reviews of the program.
3. Coordinate PCBs awareness training for Town of Enfield personnel (e.g., teachers, staff, management, maintenance, cleaning).
4. Document that periodic surveillance is conducted of all known PCBs four times per year in August, December, March and June
5. Document that periodic ventilation measurements are conducted four times per a year in August, December, March and June
6. Respond to events involving the potential disturbance or release of PCBs.
7. Coordinate air monitoring with Consultant for exposure assessment purposes, twice per year in April and December.

3.2.2 Project Manager or Designee (EDPW)

The Project Manager (PM) or their designees have the following responsibilities:

1. Management of all PCB related tasks/responsibilities in the construction renovation process within their project/areas.
2. Schedule PCB inspections when required for projects.
3. Ensure that contractors are aware of the Town of Enfield PCBs policies prior to initiation of construction, renovation or maintenance activities.
4. Notify the PCB Program Coordinator prior to the initiation of all PCB-related work activities at JFK Middle school.

3.2.3 Custodial Services Crew Leaders or Designee (EDPW)

Custodial Services Crew Leaders or designee has the following responsibilities:

1. Confirm that all O&M tasks are conducted by maintenance and custodial staff is in compliance with the Town of Enfield policy.
2. Ensure maintenance and custodial employees receive training in PCB hazards and O&M tasks.
3. Report any PCB materials that may be damaged or have the potential to be damaged to the PCB Program Coordinator.
4. Manage all PCB-related tasks/responsibilities during routine and emergency O&M activities.
5. Ensure that contractors are aware of the Town of Enfield PCB policies prior to initiation of O&M activities

6. Notify the PCB Program Coordinator prior to the ignition of all PCB-related work activities at JFK Middle school.

3.3 Operations and Maintenance Employees

Maintenance and custodial staff will conduct O&M activities where PCBs may be present and have the following responsibilities:

1. Inform their supervisors of any potential PCB materials.
2. Prevent the disturbance or removal of PCB material.
3. Inform the PCB Coordinator of any potentially damaged PCB materials.
4. Implement interim measures such as wet wiping, HEPA vacuuming and damp mopping) as required in this Plan

At JFK Middle School, the removal and/or disturbance of PCBs will occur only during construction, renovation, emergency building systems repairs, or when the material is found to be damaged or has the potential to be damaged. Only trained abatement contractors will engage in any work activity that disturbs, impacts or involves the removal of PCBs.

3.4 Environmental Consultants and Contractors

Work activities that involve disturbing PCBs shall be conducted by approved qualified and licensed contractors and/or consultants. The Town of Enfield Department of Public Works will maintain copies of contracts and licenses of personnel performing work on PCB-related projects in their office.

3.4.1 PCB Inspectors

When project specific PCB inspections are required, independent consultants will be used to inspect for PCBs within the designed area/project. The responsibilities of the PCB consultant include:

1. Conduct periodic visual inspections and perform indoor air and wipe sampling within the assigned area based upon industry guidelines and regulatory standards for times a school year.
2. Conduct PCB inspections prior to construction, renovation or repair work that could potentially disturb PCBs within proposed project area based upon industry guidelines, regulatory standards, and this O&M Plan.
3. Ensure that all samples are analyzed at accredited laboratories and comply with industry guidelines and regulatory standards.
4. Report all PCB inspection results to their contact in the Facilities and project Management Department and/or the PCB Program Coordinator in a timely manner.
5. Prepare written reports of all PCB inspection or sampling activities for submission to the PCB Program Coordinator for JFK Middle School, EPA, and the Connecticut Department of Energy and Environmental Protection (CTDEEP).

3.4.2 PCB Abatement Contractors

When PCB abatement activities require independent contractors to be used, the responsibilities of the PCB abatement contractor include:

1. Conduct the PCB abatement within the assigned areas in accordance with the Performance Based or Self Implementing Disposal Plan and guidelines and regulatory standards.
2. Maintain all certifications required to conduct PCB abatement.
3. Complete the required abatement closeout packages and return to their contact in Enfield Department of Public Works.
4. Any PCB abatement work would require notification to both CTDEEP and EPA given the interim measures in-place.

All project personnel engaged in PCB remediation work shall be trained in accordance with OSHA Regulations 29 CFR 1910.1000 and 29 CFR 1910.1200. The Remediation Contractor shall provide an On-site Project Supervisor having a minimum of eight (8) hours of supervisor training in hazardous waste site operations in accordance with the requirements of 29 CFR 1910. The supervisor must be on site at all times during remediation work. Documentation of OSHA 40-Hour HAZWOPER training for all employees and subcontractors and 8-Hour HAZWOPER Supervisor Training for the designated on-site Health and Safety Officer for the remediation work shall be provided to the Environmental Consultant and Enfield Department of Public works PCB Program Coordinator prior to the commencement of related remediation work activities.

3.5 Other Contractors

3.5.1 General Contractors

The Town of Enfield general contractors (GCs) have various responsibilities in maintaining safe work environments at JFK Middle School during construction and renovation projects. GCs will generally not be directly involved with PCB abatement activities; however, renovation and demolition activities when necessary. The project GCs responsibilities related to PCB include:

1. Avoid any activities that may potentially disturb PCBs (e.g. demolition) prior to the PCB inspections and abatement when necessary.
2. Notify the PM and the PCB Program Coordinator immediately upon discovering that PCBs may have been disturbed or released. Assist in securing the area at the direction of the PM and PCB Coordinator.
3. In the event of any disturbance of PCBs, whether intentional or un-intentional, notification should be provided to the agencies, verbally within 24-hours of discovery, and in writing within 7 days, unless this discovery is associated with a scheduled inspection, which could then be captured in the inspection report.

3.5.2 Subcontractors

Project subcontractors are responsible for performance of their work related to all JFK Middle School project requirements, including those regarding PCBs. Subcontractors of project GCs, will not be directly involved with PCB abatement, unless they are a Hazardous material abatement contractor. Renovations and demolition activities within projects shall occur after the PCB inspection and abatement activities. The project subcontractor responsibilities' related to PCBs are as follows:

1. Avoid any and all activities that may potentially disturb PCBs (e.g., demolition/renovations)
2. Report the discovery of any damaged PCB material to the PCB Program Coordinator.
3. Report any potential disturbance or release of PCBs to the PCB Program Coordinator.
4. In the event of any disturbance of PCBs, whether intentional or un-intentional, notification should be provided to the agencies, verbally within 24-hours of discovery, and in writing within 7 days, unless this discovery is associated with a scheduled inspection, which could then be captured in the inspection report.

4 Program Administration

4.1 Training Requirements

The following describes the required levels of training related to the O&M Plan. All Enfield Department of Public Works Employees and contractors who perform O&M activities in areas where PCBs are present shall receive general PCB awareness training. All outside contractors involved in PCB-related work must maintain all of the required training required by state and federal guidelines pertaining to PCBs.

4.1.1 Operations Maintenance Staff and Contractors

Activities that might disturb PCBs will be carried out only by the properly trained EDPW employees. However, maintenance and custodial staff may work in areas where PCBs are present. All contractors performing routine O&M that may unintentionally disturb PCBs are required to provide training for their employees in accordance with the following:

All maintenance or custodial staff (and other employees) who perform housekeeping or maintenance activities in areas where PCBs are present, will receive general PCB awareness training annually, typically 2 hours. Training will cover:

1. Health and safety hazards of PCBs
2. Location of PCBs at JFK Middle School
3. How to recognize damaged and deteriorated PCB-containing materials
4. Housekeeping standards and operating procedures
5. Response to potential PCBs release episodes
6. Overview of the JFK Middle School O&M Plan

4.1.2 Hazardous Material Training

Activities likely to disturb PCBs will be carried out by a qualified abatement/remediation contractor. The contractor(s) responsible for performing these remediation activities will have received 40-hour Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training.

The 40-hour course is specifically designed for workers who are involved in clean-up operations, voluntary clean-up operations, emergency response operations, and storage, disposal, or treatment of hazardous substances or uncontrolled hazardous waste sites. HAZWOPER 40 Hour is required for employees working on a project consisting of Uncontrolled Hazardous Waste Operation mandated by the Government.

Table 1 below summarizes the minimum training requirements for EDPW staff, contractors, and vendors who may work in areas where PCBs are present.

Table 1 - Summary of Minimum PCB Training Requirements for EDPW Staff

<u>Personal Category</u>	<u>Type of Training</u>	<u>Training Frequency</u>
Facilities Department Managers	Awareness level	Annual
Facilities Department Staff	Awareness level	Annual
Project Managers	Awareness level	Annual
Other EDPW personal potentially involved in O&M activities (e.g., custodial)	Awareness level	Annual
Project General Contractors and non-abatement sub-contractors	Awareness level	Annual
Summary of Minimum PCB Training Requirements for Abatement/Remediation Contractors		
Abatement/Remediation Staff	HAZWOPER (40 Hour training course)	Initial training with 8 hour refresher annually

4.2 Hazard Communication

Hazard Communication is an organized program designed to meet the requirements of the Code of Federal Regulations (29 CFR 1910.1200). It has specific requirements regarding an employee's right to know and understand chemical hazards in the workplace. The Hazard Communication policy outlines requirements and responsibilities for the program at various levels of involvement.

The Town of Enfield will notify contractors of the presence of PCBs that the contractor's employees or subcontractors may contact. The intent of the PCB hazard communication program is to provide the necessary information so that individuals can take the appropriate level of pre-caution to minimize potential exposures.

4.3 Inventory

The Town of Enfield will provide the Feasibility Hazardous Material Surveys that summaries the locations, material type, approximate quantity and condition of the PCB material, along with dates of

inspection and samples collection. *Appendix B* includes an inventory summary of identified PCBs at JFK Middle school.

4.4 Incident Reporting

Any incident, accident or emergency where PCB may have been released must be reported to the PCB Program coordinator as soon as feasibly possible. All response actions pertaining to the release shall be performed in accordance with all State and Federal regulatory requirements for notifications, clean-up, repair or removal. In the event of any disturbance of PCBs, whether intentional or unintentional, notification should be provided to the agencies, verbally within 24-hours of discovery, and in writing within 7 days, unless this discovery is associated with a scheduled inspection, which could then be captured in the inspection report.

4.5 Inspections

The PCB Program Coordinator will perform or designate qualified personnel to perform detailed inspections of PCB-containing materials at JFK Middle School four times per year (August before that start of school, December, March, and June) or more frequently if conditions warrant. The intent of these inspections is to identify PCB-containing materials that may be in a condition, such as significantly damaged, that it could pose a potential hazard and should be abated or repaired. The inspections will include location, quantity, and condition of PCB materials. (e.g., exterior window, door, vents, louvers, control joints caulking and glazing compounds, interior caulking and glazing compounds). Inspection of constructed fencing at all spokes of the school will be conducted by custodial staff on a weekly basis. Corrective actions will be performed as required to address any issues identified during the visual inspections. (Please use form in *Appendix F* to record all inspections)

4.6 Recordkeeping

The PCBs Program Coordinator or designee shall maintain all records as related to PCBs at JFK Middle School.

4.7 Program Review and Revision

The O&M Plan and BMPs will be reviewed annually by the Town of Enfield's Consultant to included changes in regulation and management process at JFK Middle School. A review will also be conducted of all known PCBs inventory to assure that areas of JFK Middle School where PCBs exist are inspected routinely and records are maintained appropriately. All revisions to this O&M Plan will be recorded in Table D.1 of *Appendix D*.

5 PCB Related Activities

5.1 PCB Related Activities

The Town of Enfield Department of Public works will manage all O&M and BMPs activities at the JFK Middle School. O&M activities include routine maintenance of the JFK Middle School systems and components. O&M activities are also conducted by the Custodial Department.

Renovation activities are construction related projects that include demolition and/or renovation of the JFK Middle school. Renovation activities are managed by the EDPW Project Manager and are primarily conducted by construction contractors (e.g., project general contractor and subcontractors).

5.2 Operations and Maintenance Activities

All O&M and BMPs tasks that may potentially disturb PCBs shall be reviewed for their impact on PCBs prior to conducting the task. Once reviewed, O&M tasks will include, where necessary, engineering and administrative controls to ensure that the task are conducted without disturbing the PCBs. Examples of O&M tasks that would potentially disturb PCBs may include, but not limited to: window or door repair activities the disturbance of any interior and exterior caulking and glazing compounds throughout the school. The EDPW can develop and customize standard operating procedures (SOPs) for routine activities to facilitate this work. These procedures must be reviewed and approved by the PCB Program Coordinator. General SOPs for renovation and repair work and small response tasks are provided in *Appendix E*.

5.2.1 Maintenance Activities

O&M activities or routine activates performed by facilitates maintenance personal may involve situations where PCBs may be present, but not disturbed. Where these instances exist, the employee encountering the material must not contact, disturb or work on or around the PCBs. The PCB Coordinator or Program Manager will review the work to be done, and ensure that, as warranted, appropriately trained personal perform the work. Where possible employees should:

1. Avoid sweeping or dry brushing in classrooms, hallways and gymnasium (along windows and control joints) where the presence of PCB-containing dust or debris is possible.
2. Avoid cutting, drilling holes in, or sanding into interior masonry control joints and exterior expansion joints.
3. Incorporate the use of high efficiency particulate air (HEPA) vacuums during cleaning at the JFK Middle School.

If disturbed or damaged material is identified prior to or during routine maintenance activities, the PCB Program Coordinator must be contacted immediately.

5.2.2 Housekeeping Activities

Housekeeping activities performed by custodial staff may involve work in areas where PCBs may be present, but not disturb. Where these instances exist, the employee encountering the material must not contact, disturb, or work on or around the PCBs. The PCB Coordinator or Program Manager will review the work to be done, and ensure that, as warranted, appropriately trained personnel perform the work.

Housekeeping activities may also involve cleaning of the windows, which have PCBs caulking and glazing compounds or cleaning adjacent to encapsulated PCB materials associated with the interior masonry control joints. Weed whacking grass from the base of the building to five feet out instead of using a lawnmower; will only be conducted after an inspection is conducted for caulk and glazing compounds debris from the exterior of the building to make confirm no spreading of any caulk or glazing compounds that may have dislodged from the building between each weed whacking event. Cleaning and or other related activities involving these materials shall include utilizing techniques that minimize the potential for damage to the encapsulated surfaces.

6 PCB Response Plan

It is not anticipated that PCBs will be impacted or damaged during routine work activities at JFK Middle School; however, if damaged PCM material is observed or if PCB material is accidentally disturbed, appropriate procedures must be followed to assure safety to workers and surrounding occupants.

These procedures should be followed by any EDPW O&M employee or outside service contractor who is notified of, observes, or causes damage to PCB-containing materials, resulting in an unplanned, accidental, or uncontrolled release of PCBs at JFK Middle School. It is anticipated that the PCB Program Coordinator would typically manage the response activity as outlined below. The procedures call for notification of appropriate personnel and isolation of the affected area in order to minimize potential release until an outside abatement contractor arrives to clean up and repair the damage.

6.1 Notification

If an EDPW employee, Staff, custodial or outside service contractor is notified of, observes, or causes damage or disturbance to PCB-containing materials in the school building; they should immediately notify their supervisor and the PCB Program Coordinator.

6.2 Isolate the Area

Responding personnel are responsible for isolating the area of the release from adjacent spaces at the direction of the PCB Program Coordinator:

1. Segregate and secure the area to prevent unauthorized access.
2. Take steps to prevent further disturbance or damage to the material.
3. Evaluate the extent of the damage or disturbance of the material, the location and potential for area occupant exposure.

4. Coordinate a remediation effort by a professional PCB remediation contractor. This may include repair of the damaged material, or clean-up of observed material. All clean-up or repair activities must be performed in accordance with regulations for removal, handling, and disposal of PCB Bulk Product Waste or PCB Remediation Waste (Contains Asbestos containing Materials). PCBs waste storage containers and labels may be obtained through the transportation and disposal vendor.

7 Ventilation Plan

The goal of the Heating and Ventilation Systems Sequence of Operations is to recommend an operating procedure that will ensure that any accumulation of PCBs in indoor air of the school during unoccupied/unventilated hours is reduced prior to occupancy. The recommendation is based on information currently available from previous testing; this recommendation may be refined as additional information is obtained through the ongoing mitigation and air and wipe sampling program.

Verification of ventilation rates and balancing of all HVAC systems shall be conducted four times per year at JFK Middle School, by a licensed HVAC Technician. These measurements shall be conducted in August, December, March and June. We recommend ventilation meets the manufactures specifications requirements; but at minimum do adjustments and repairs to maximize current ventilation systems, until full abatement or school renovation has been completed. EDPW will conduct the necessary repairs to the HVAC equipment when required.

Based on the findings of the monitoring and analyses described in the PCB Air and Wipe sampling report dated September 11, 2017, the O&M Plan and BMPs will institute the following additional engineering and administrative controls to manage PCB levels at JFK Middle School during the non-heating season:

1. Thermostat set points to minimum position (63 degrees Fahrenheit)
2. Continuous operation of unit ventilators in classrooms
3. Continuous operation of central exhaust systems where applicable
4. Open windows during school hours except when not feasible because of precipitation or cool temperatures.
5. Replace existing unit ventilator and HVAC system air filters (recommend higher MERV ratings) quarterly.
6. Clean window-mounted air conditioner filters quarterly.
7. Alter HVAC controls to permit fans to run without heating to draw in fresh air.

Sampling results indicate that increasing ventilation through a combination of these additional engineering and administrative controls provides further mitigation of PCB concentrations in indoor air of the school. During the heating season the system will be operated with thermostat set points at a minimum position of 70 degrees Fahrenheit.

8 PCB Air and Surface Sampling Plan

8.1 Site Specific Criteria

Potential exposure to airborne PCBs shall be controlled to as low as reasonably achievable, and in all cases comply with the current published limit of **300 ng/m³ PCBs** (nanograms per cubic meter).

Potential exposure to PCBs in surface dust shall be controlled to as low as reasonably achievable, and in all cases comply with a more stringent criteria of **1 µg/100 cm²** (Micrograms per 100 square centimeters) set forth by the EPA Region 1 PCB Coordinator.

If samples are above the currently published established criteria it will require a follow-up visual assessment of the space to determine if conditions exist that may be contributing to the levels of PCBs in the air or on surfaces. If conditions that may be responsible for any exceedance(s) are identified (e.g., improper ventilation), immediate corrective actions will be taken by EDPW and follow-up sampling will be conducted to evaluate the effectiveness of the corrective actions.

A written report will be issued to EPA Region 1 upon completion of each round of sampling. Any value above the established criteria will be reported verbally or by email to EPA Region 1 within 24 business hours. All follow-up activities and corrective actions will be reported to EPA Region 1 within 7 business days.

8.2 Air Sampling

Air sampling will be conducted at a minimum of four times a year in August before the start of school, December, March and June, and a minimum of 90 air samples will be collected during a school year. Indoor air samples will be collected at locations to characterize potential exposure risks to occupants of JFK Middle School. The locations of sampling in common areas would likely be sampled each quarter to allow for seasonal and spatial comparisons. We will conduct quarterly sampling throughout the school with the intent to sample every space in the school. Indoor air samples were collected in accordance with USEPA Method TO-10A utilizing low-flow pumps. Indoor air samples were run for a minimum of 4 hours, during regular school hours, for each of the individual air sampling events.

- Appropriate sampling media will be prepared prior to the sampling event. Sampling media will consist of glass tubes (30-mm x 70- mm tubes) filled with pre-cleaned open-cell polyurethane foam (PUF);
- Sample collection tubes will be situated with the inlet in a downward facing position at a height of 1 meter from ground on a sampling stand or similar apparatus that will be used to secure the sampler;
- An active low volume air-flow pump, capable of unattended 4-24-hours of operation (battery or direct power) will be used to provide a flow of 1.0 to 5.0 liters per minute through the PUF sample media;
- Pump flow rates at the beginning of sampling and again at the completion of the sampling period will be recorded along with pump start and stop times;

- For each sample, the cumulative sample duration time and average flow rate will be used to calculate the air volume sampled; a minimum sample volume of 1,000 to 1,200 L of air will be sampled over the monitoring period to achieve the EPA's approval laboratory reporting limit of $\leq 0.050 \mu\text{g}/\text{m}^3$ for total PCBs for indoor air samples;
- Devices to record the interior and exterior building temperature during sample collection will be deployed along with the air monitors;
- Ambient atmospheric pressure readings will be collected from the nearest official recording station for the area.

Mechanical systems in the school will be operated in accordance with this Operations and Maintenance Plan. Ambient temperature and school temperature will be measured during sampling. Quality assurance and quality control sampling will include blanks, and duplicate samples.

Dates of the air sampling may be adjusted and an additional round or rounds of air sampling may be conducted based on events, work activities, or site conditions at the school.

Indoor air samples will be collected, properly labeled and transferred to Phoenix Laboratories of Manchester, CT or Contest Analytical Laboratory in East Longmeadow, MA under the standard chain of custody for analysis by EPA 680(for homologs) with 3540C soxhlet extraction.

8.3 Surface Dust Sampling

Sampling will be conducted four times per year in August before the start of school, December, March and June. Samples will be collected at indoor classrooms, locker rooms, gymnasium, auditorium, offices, and hallway locations to evaluate potential exposure risks to occupants of JFK Middle School.

Hexane wipe samples will be collected in accordance with 40 CFR §761 Sub-Part P. Sufficient sample size of 100 square centimeters (100 cm²) was collected to ensure a detection limit that allows quantification of the data relative to the EPA advisory concentrations. Quality assurance and quality control sampling will include blanks and duplicates samples. A minimum of 130 surface hexane wipes will be collected during a school year. The locations of sampling in common areas would likely be sampled each quarter to allow for seasonal and spatial comparisons. We will conduct quarterly sampling throughout the school with the intent to sample every space in the school.

- Prior to sampling, wipes consisting of clean cotton gauze will be soaked with hexane and placed in clean wide mouthed sample jar.
- A 10 centimeter (cm) by 10 cm template will be used to define the sampling area on the selected surfaces. A flat surface will be selected for sampling.
- Samples will be collected on the interior surfaces where PCB-containing caulking and glazing compounds exist. The wipe will be dragged across the template area horizontally, then vertically and then diagonally;
- The wipe sample will then be placed in a separate glass sample jar labeled with the sample time, date, location and surface description;
- Samples will be transported to a laboratory in a cooler with ice. The chain of custody will indicate the surface area for each sample, along with the date, time and analysis requested;

- Samples will be delivered to an environmental testing laboratory that is certified to perform PCB analyses;
- Samples will be extracted from the wipe using EPA Method 3500B/3540C as outlined in SW-846 guidance for laboratory analyses;
- Sample extracts will be analyzed by EPA Method 8082 for PCBs.
- Results will be reported in micrograms (μg) per 100 cm^2 by dividing the result in $\mu\text{g}/\text{wipe}$ by the surface area of 100 square centimeters.

Prior to collecting samples, visual inspections of representative areas will be completed to note evidence of dust, debris, or surface such as student desks and work tables. In addition, samples will be collected from surfaces more likely to accumulate dust such as window sills and book shelves.

Surface wipe samples will be collected, properly labeled and transferred to Phoenix Laboratories of Manchester, CT under the standard chain of custody for EPA 8082 analysis with 3540C soxhlet extraction.

8.4 Quality Assurance/Quality Control (QA/QC)

QA/QC samples will be collected during the monitoring. QA/QC samples for both wipe samples and indoor air samples will be collected.

Wipe QA/QC samples will include field duplicate and field blank samples. A field duplicate sample is used to evaluate both the field sampling procedure and laboratory analytical precision. The duplicate sample will be collected using the same sampling techniques noted above and will be collected immediately adjacent to the original sample. Field duplicate samples will be collected and analyzed for 10% of the samples. The field blank will be an analysis of the sample media. The sample media (hexane soaked gauze pad) will be analyzed to verify that the media is free of PCBs prior to sample collection. Field blank samples will be collected and analyzed for 5% of the samples.

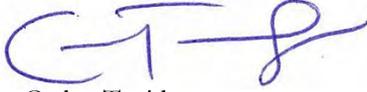
Indoor air QA/QC samples will include field duplicate, and field blank. A field duplicate will be collected using the same sampling techniques. Field duplicate samples will be collected and analyzed for 10% of the samples. The field blank will be an analysis of the sample media without drawing air through the sampling tube. Field blank samples will be collected and analyzed for 5% of the samples.

8.5 Record Keeping

Documentation of sampling and analytical results for activities outlined in the O&M Plan shall be maintained by the school and EDPW. These records will be available for inspection by EPA, CTDEEP, CTDPH and local health departments as well as the public. Results of the monitoring outlined in the O&M will be available for review by school employees, parents, and the public. PCB testing records will be available during normal business hours at the school.

On-going PCB testing records and periodic visual inspection forms shall be added to the O&M Plan file located in the main office of the school to update records.

Plan Prepared by:



Carlos Texidor
Senior Project Manager

Reviewed by:

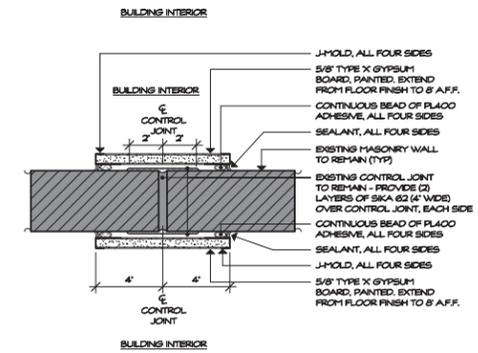
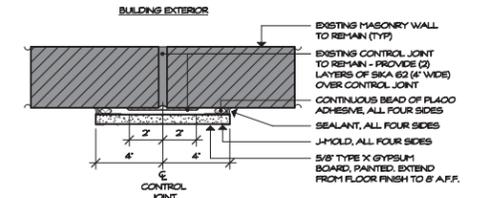
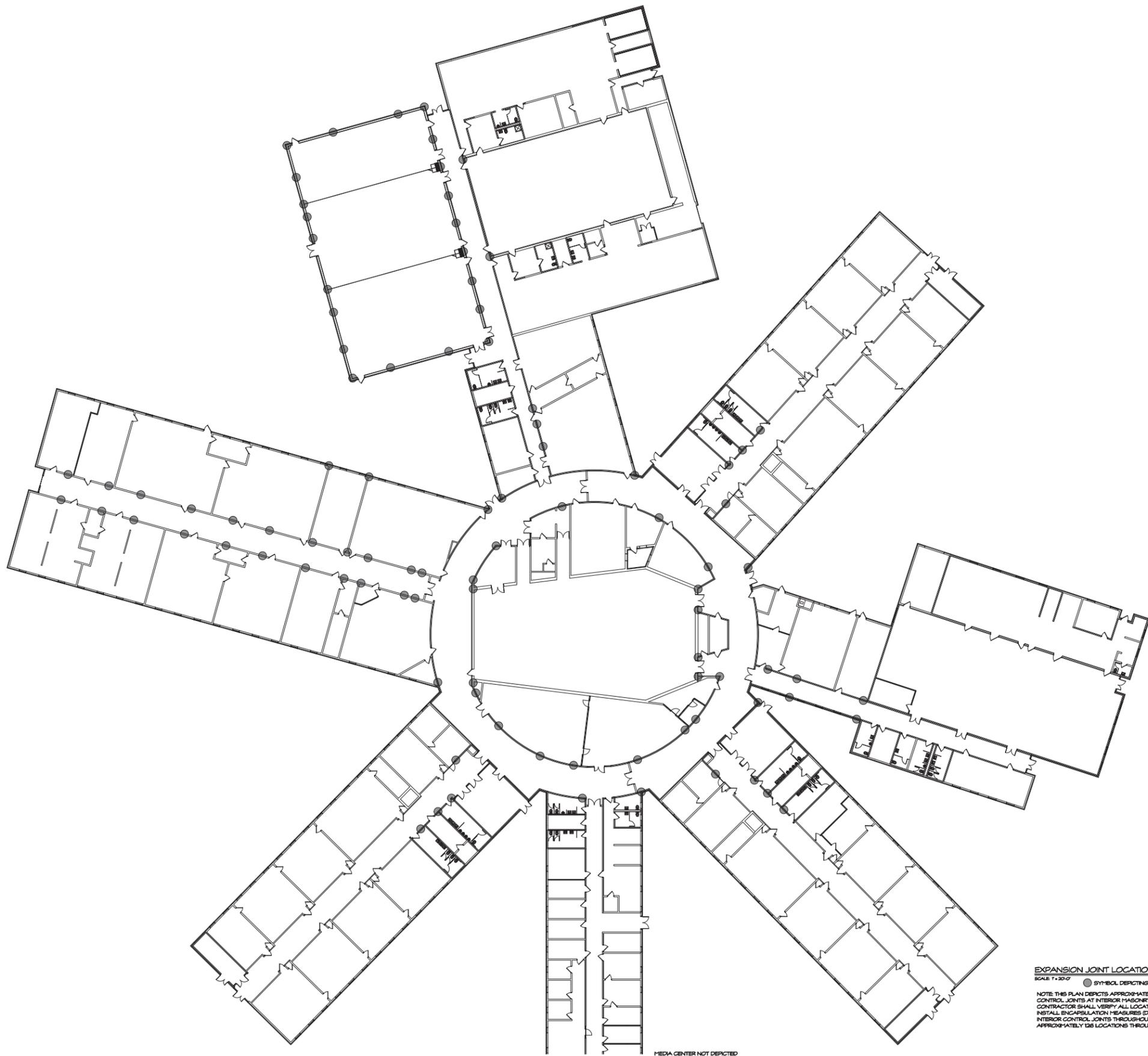


Robert L. May Jr.
President

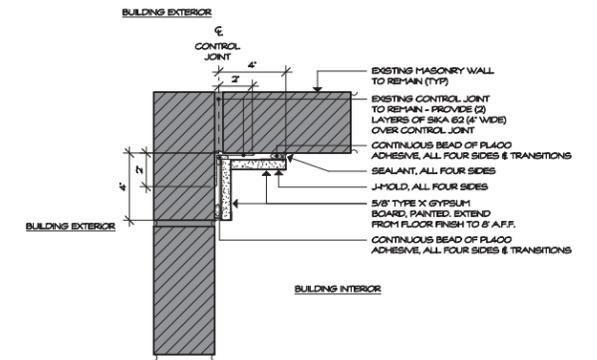
Figures



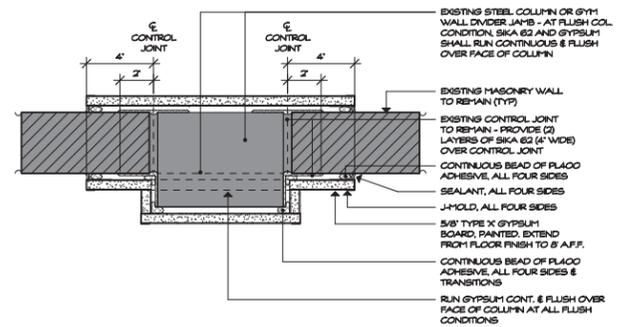
Figure 1: 16.136 JFK Middle School - A1-Final PCB Expansion Joint
Encapsulation Plan and Details



CONTROL JOINT ENCAPSULATION - PLAN DETAIL
SCALE 3/4"=1'-0"
2
A1



CONTROL JOINT ENCAPSULATION @ WALL CORNER - PLAN DETAIL
SCALE 3/4"=1'-0"
3
A1



CONTROL JOINT ENCAPSULATION & COLUMN & GYM DIVIDERS - PLAN DETAIL
SCALE 3/4"=1'-0"
4
A1

EXPANSION JOINT LOCATION PLAN
SCALE 1/8"=1'-0"
1
A1

NOTE: THIS PLAN DEPICTS APPROXIMATE LOCATION OF ALL CONTROL JOINTS AT INTERIOR MASONRY WALLS (BRICK & CMU). CONTRACTOR SHALL VERIFY ALL LOCATIONS IN FIELD AND INSTALL ENCAPSULATION MEASURES (DETAIL 2/A) AT ALL INTERIOR CONTROL JOINTS THROUGHOUT THE ENTIRE BUILDING, APPROXIMATELY 126 LOCATIONS THROUGHOUT.

Project Title:
Town of Enfield
John F. Kennedy Middle School - PCB Encapsulation
155 Raffia Road, Enfield, CT 06082



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Revision	Description	Date	Revised By

Drawing Title:
PCB EXPANSION JOINT ENCAPSULATION - PLAN AND DETAILS

Date:
SEPTEMBER 19, 2017

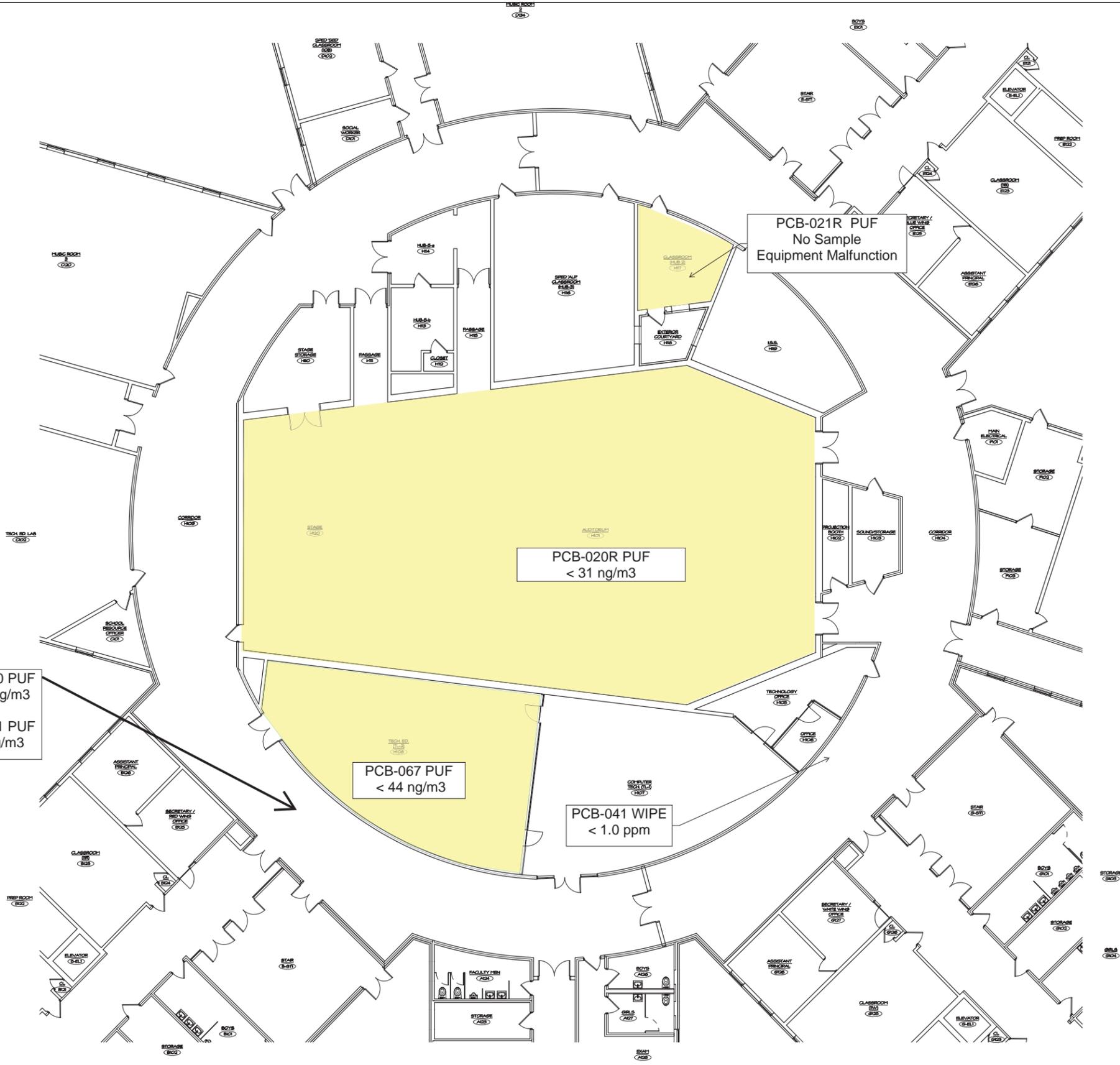
Scale:
As Indicated

Drawn By:
C. NARDI

Project Number:
16136

Drawing Number:
A1

Figure 2: PCB Air and Wipe Samples – May-June 2017



MAIN LEVEL FLOOR PLAN - AUDITORIUM
SCALE: 1/8" = 1'-0"

Project Title:
 Owner
 Project Name
 Enter address here



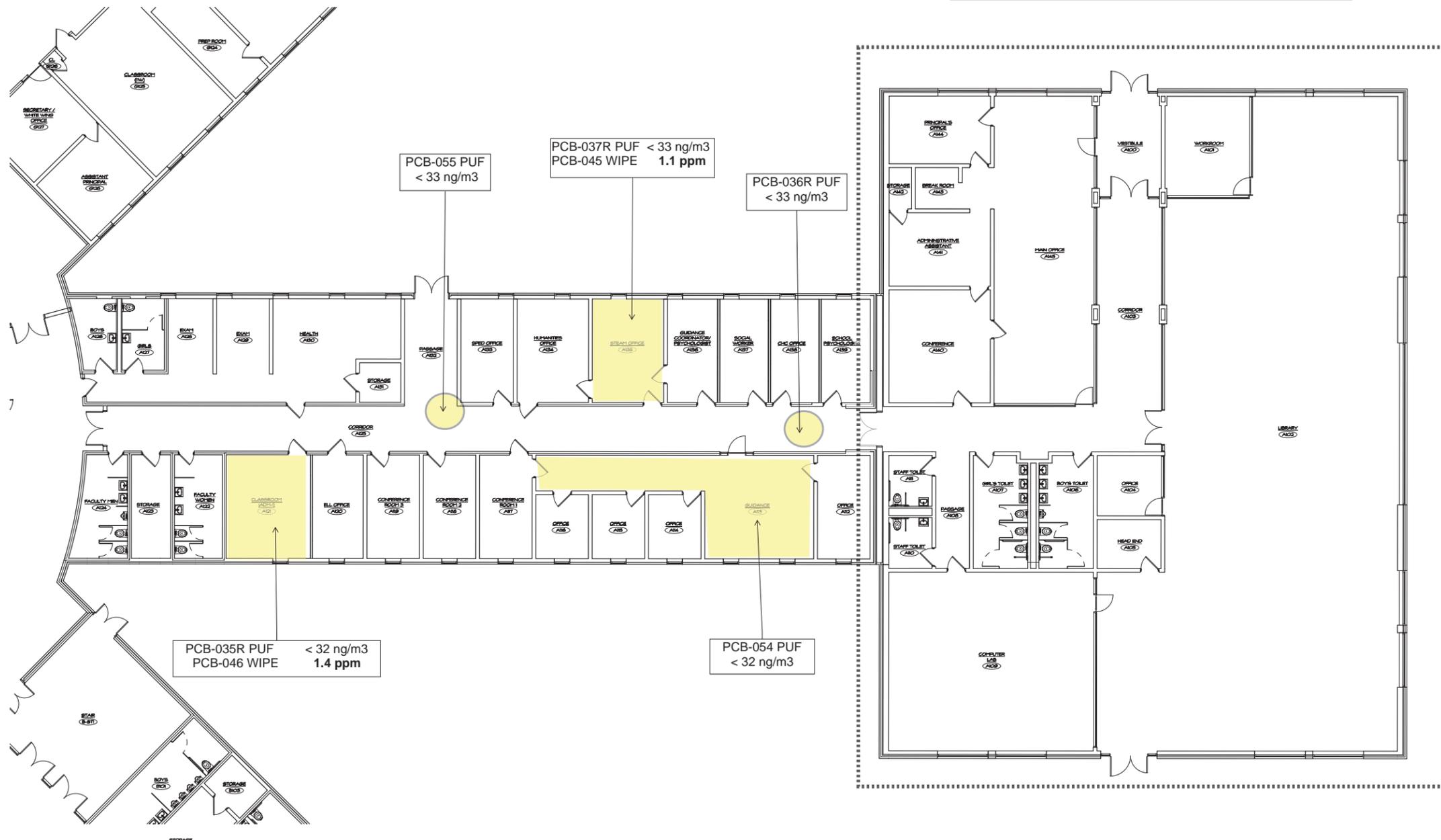
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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 AUDITORIUM
CENTRAL HUB - PCB

Date:
 Issue Date:
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author:
 Project Number:
 Drawing Number:
A100

ADMINISTRATIVE WING ADDITION
Construction Date: October 2001



MAIN LEVEL FLOOR PLAN - ADMIN. WING
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

- NEW METAL STUD PARTITIONS
- NEW MASONRY WALL (4 BRICK VENEER)
- NEW CPU WALL
- DOOR NUMBER
- WINDOW TYPE
- ROOM NAME
- ROOM NUMBER
- PARTITION TYPE
- CONSTRUCTION NOTE
- ELEVATION/SECTION NUMBER
- SHEET NUMBER
- WALL SECTION NUMBER
- SHEET NUMBER
- INTERIOR ELEVATION NUMBER
- SHEET NUMBER
- FIRE EXTINGUISHER CABINET (RECESSED ALL LOCATIONS)
- HANDICAPPED DRINKING FOUNTAIN - SEE 3/A104
- FLOOR DRAIN - SLOPE TILE TO DRAIN
- WHITE BOARD / TACK BOARD / PEG BOARD - REFER TO DRAWING A100

- GENERAL NOTES**
1. READ ALL GENERAL NOTES ON DRAWING A101.
 2. CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS.
 3. PATCH TO MATCH ALL EXISTING WALLS AND CEILING TO REMAIN AFFECTED BY NEW WORK.
 4. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK, CONCRETE MASONRY UNITS AND METAL FRAMING UNLESS OTHERWISE NOTED.
 5. ALL NEW WALL AND PARTITION ASSEMBLIES SHALL EXTEND TO UNDERSIDE OF DECK UNLESS OTHERWISE NOTED.
 6. PROVIDE CPU WITH PRE-MANUFACTURED BULLNOSE AT ALL EXPOSED CORNERS.
 7. WHERE THE WORD "ALIGN" IS INDICATED IT SHALL MEAN TO ALIGN BOTH SIDES OF WALL.

CONSTRUCTION NOTES - PLAN

No.	NOTE

GLAZING SCHEDULE

No.	NOTE

CONSTRUCTION NOTES - RCP

No.	NOTE

TOILET ACCESSORIES

No.	NOTE
1	1'-6" X 3" MIRROR (CENTER ON LAV)
2	4" X 3" 16" MIRROR (CENTER ON LAV)
3	42" HORIZ. GRAB BAR
4	36" HORIZ. GRAB BAR
5	24" HORIZ. GRAB BAR
6	18" VERT. GRAB BAR
7	30" SWING AWAY GRAB BAR
8	WALL MOUNTED H.C. WATER CLOSET (8" TO TOP OF SEAT)
9	WALL MOUNTED WATER CLOSET (8" TO TOP OF SEAT)
10	WALL MOUNTED H.C. URINAL (8" TO RIF)
11	WALL MOUNTED URINAL (8" TO RIF)
12	FLOOR MOUNTED CHILD WATER CLOSET
13	SURFACE MTD. H.C. PAPER TOWEL DISPENSER/ WASTE RECEPTICAL
14	SURFACE MTD. HC SOAP DISPENSER
15	SURFACE MOUNTED H.C. TOILET PAPER DISPENSER
16	TOILET PARTITIONS; SEE PROJ. MAN.
17	URINAL SCREEN; SEE PROJ. MAN.
18	ADA ONE-PIECE FIBERGLASS PRE-FABRICATED ROLL-IN SHOWER - COORDINATE MASONRY OPENING SIZE W/ SHOWER MANUFACTURER - SEE PLUMBING DRAWINGS
19	ADA ONE-PIECE FIBERGLASS TRANSFER SHOWER - COORDINATE MASONRY OPENING SIZE W/ SHOWER MANUFACTURER - SEE PLUMBING DRAWINGS
20	ADA FOLD DOWN SHOWER SEAT
21	CURTAIN HOOK AND ROD
22	LAV GUARD
23	BABY CHANGING STATION
24	ADULT CHANGING STATION
25	EXPRESS 2 STATION SINK H.C. LAV
26	WALL MOUNTED H.C. LAV (2 - 10" TO TOP)

Project Title: _____
Owner: _____
Project Name: _____
Enter address here: _____

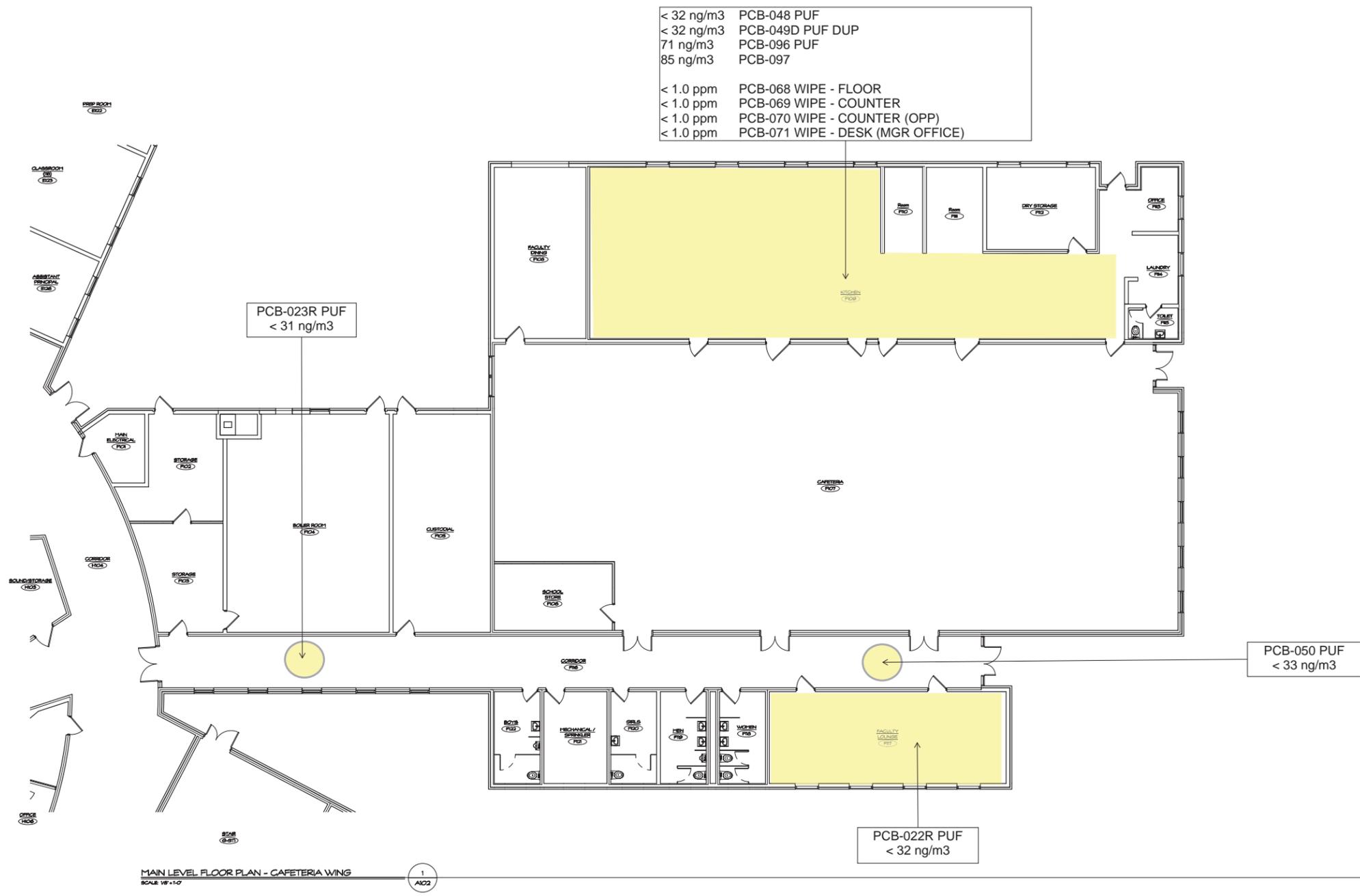


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title: **MAIN LEVEL FLOOR PLAN - ADMIN. WING**
ADMIN WING - PCB

Date: _____ Drawing Number: _____
Issue Date: _____
Scale: _____
As Indicated: **A101**
Drawn By: _____
Author: _____
Project Number: _____
Project Number: _____



MAIN LEVEL FLOOR PLAN - CAFETERIA WING
SCALE: 1/8" = 1'-0" 1 A102

Project Title:
 Owner
 Project Name
 Enter address here

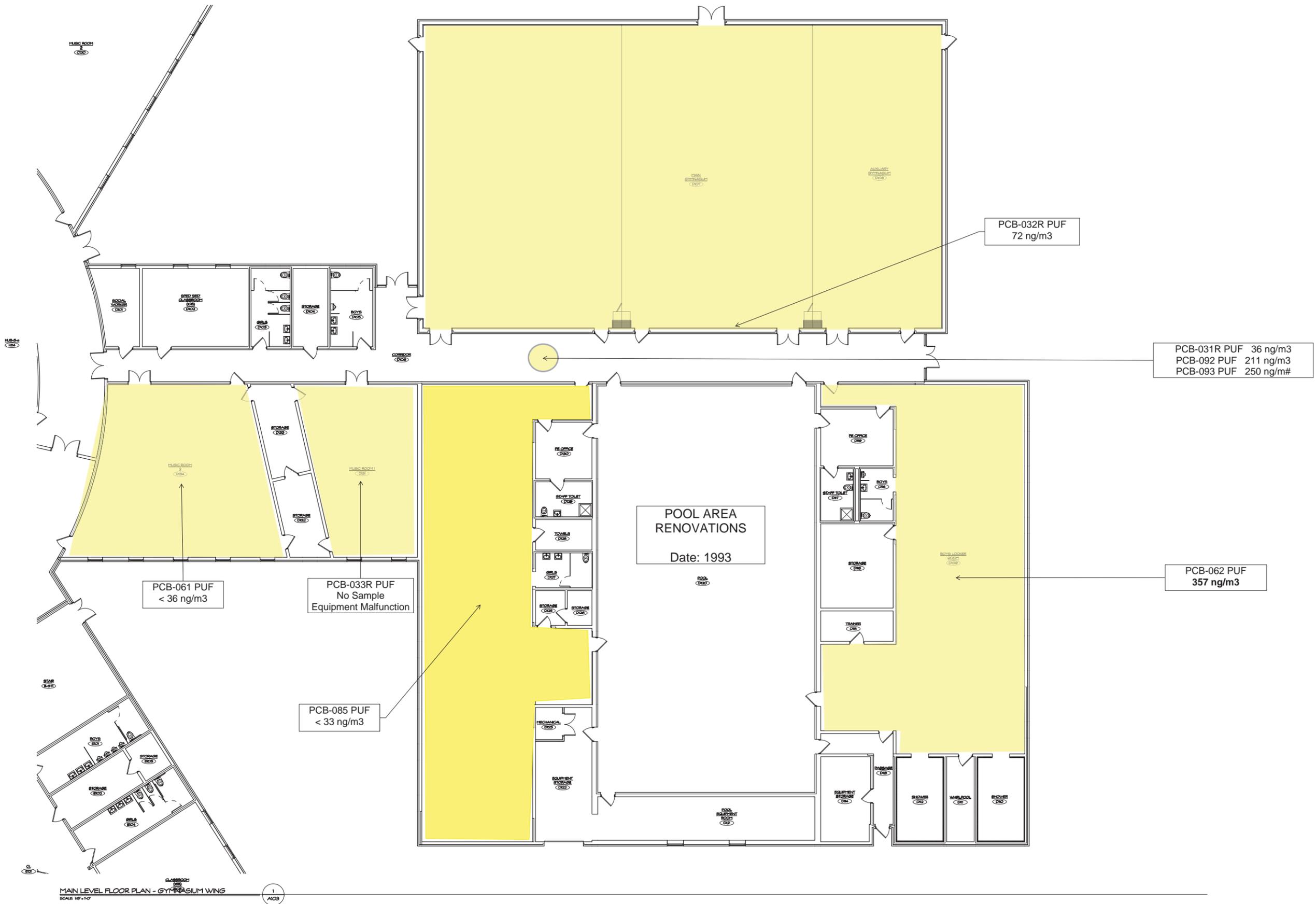


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 CAFETERIA WING
GREEN WING - PCB

Date:
 Issue Date:
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author:
 Project Number:
 Drawing Number:
A102



MAIN LEVEL FLOOR PLAN - GYMNASIUM WING
SCALE 1/8" = 1'-0"

Project Title:
 Owner
 Project Name
 Enter address here



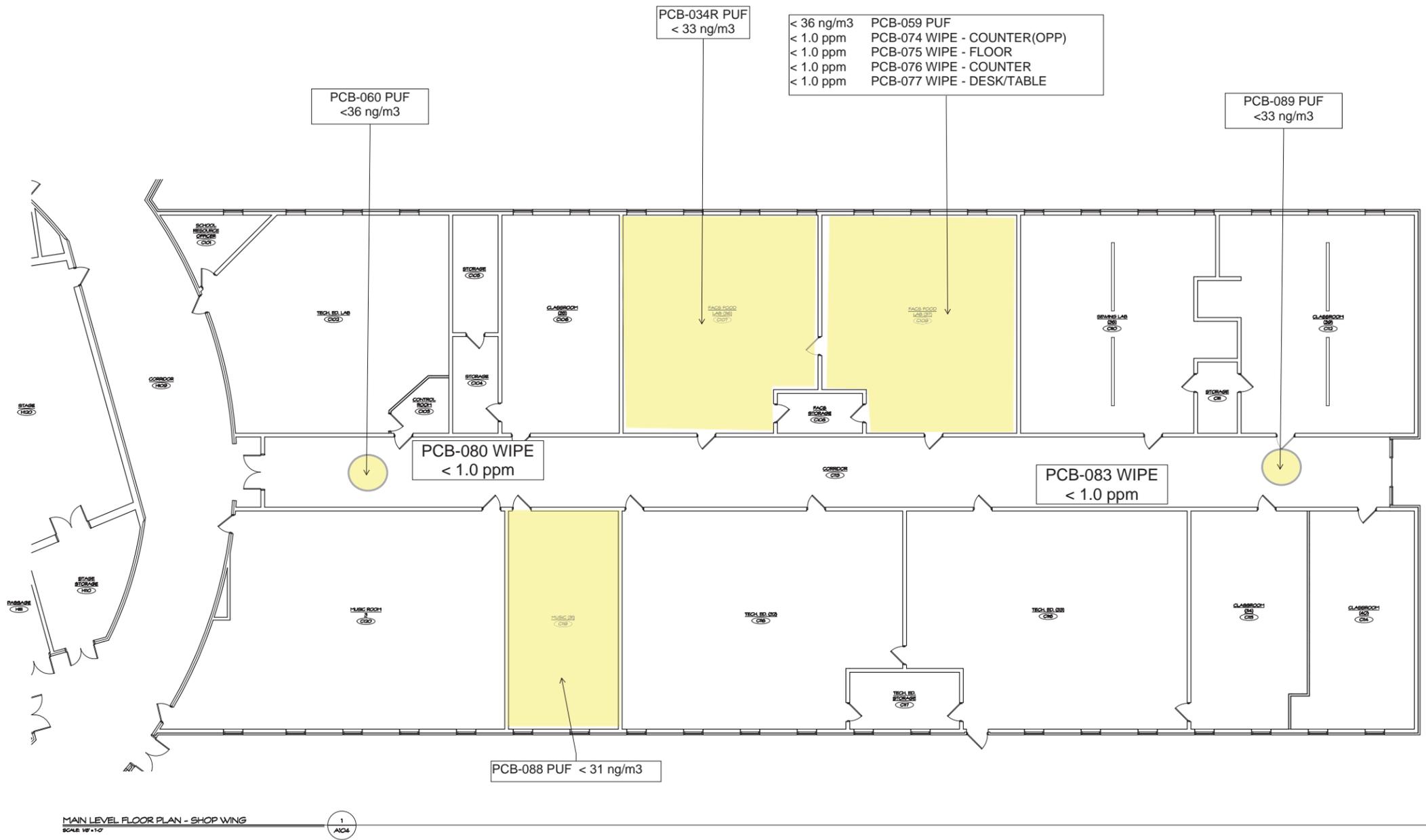
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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 GYMNASIUM WING
YELLOW WING - PCB

Date:
 Issue Date:
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author:
 Project Number:
 Project Number

A103



MAIN LEVEL FLOOR PLAN - SHOP WING
SCALE 1/8"=1'-0"

Project Title:
 Owner
 Project Name
 Enter address here



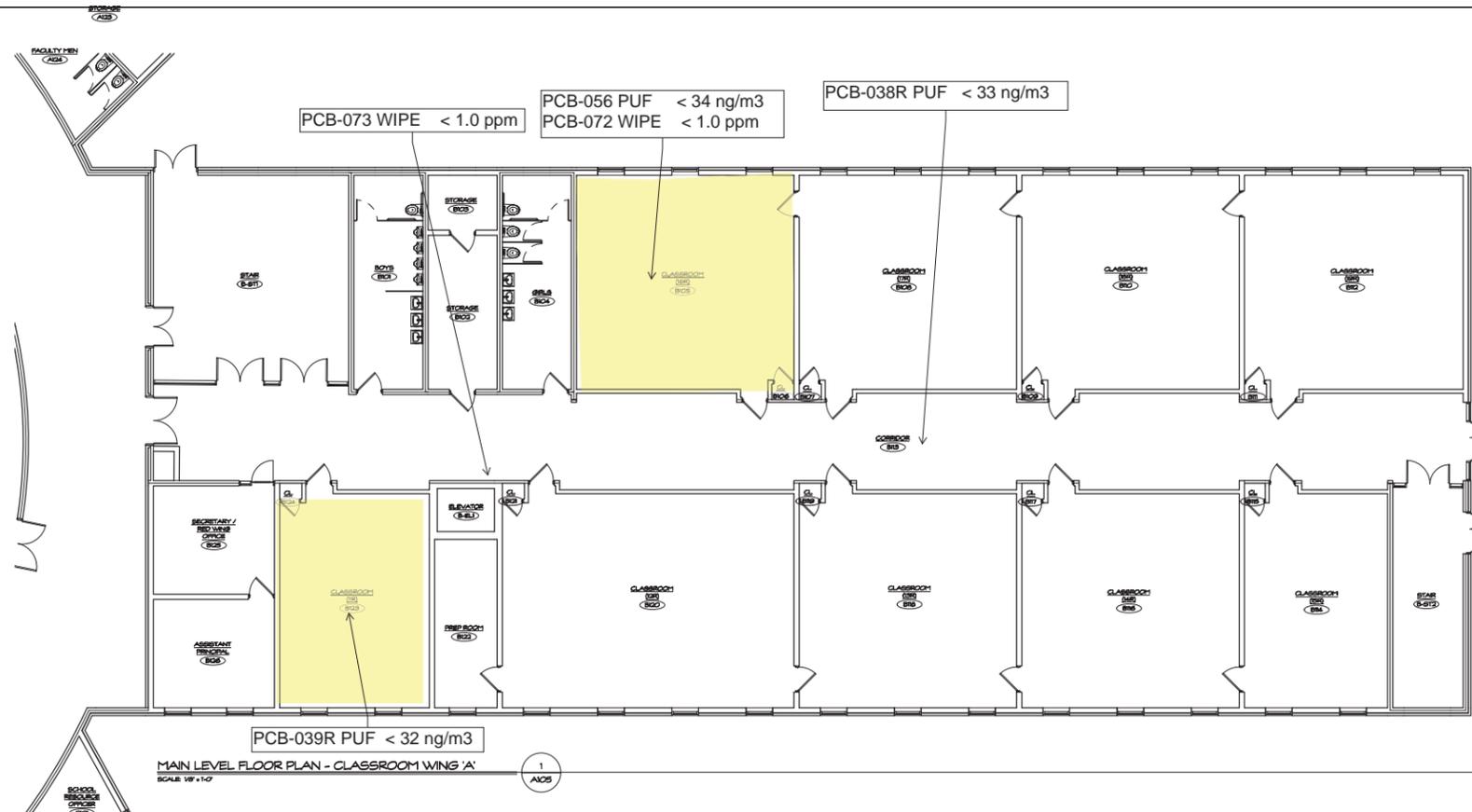
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Revision	Description	Date	Revised By
Δ	XXX	XXX	

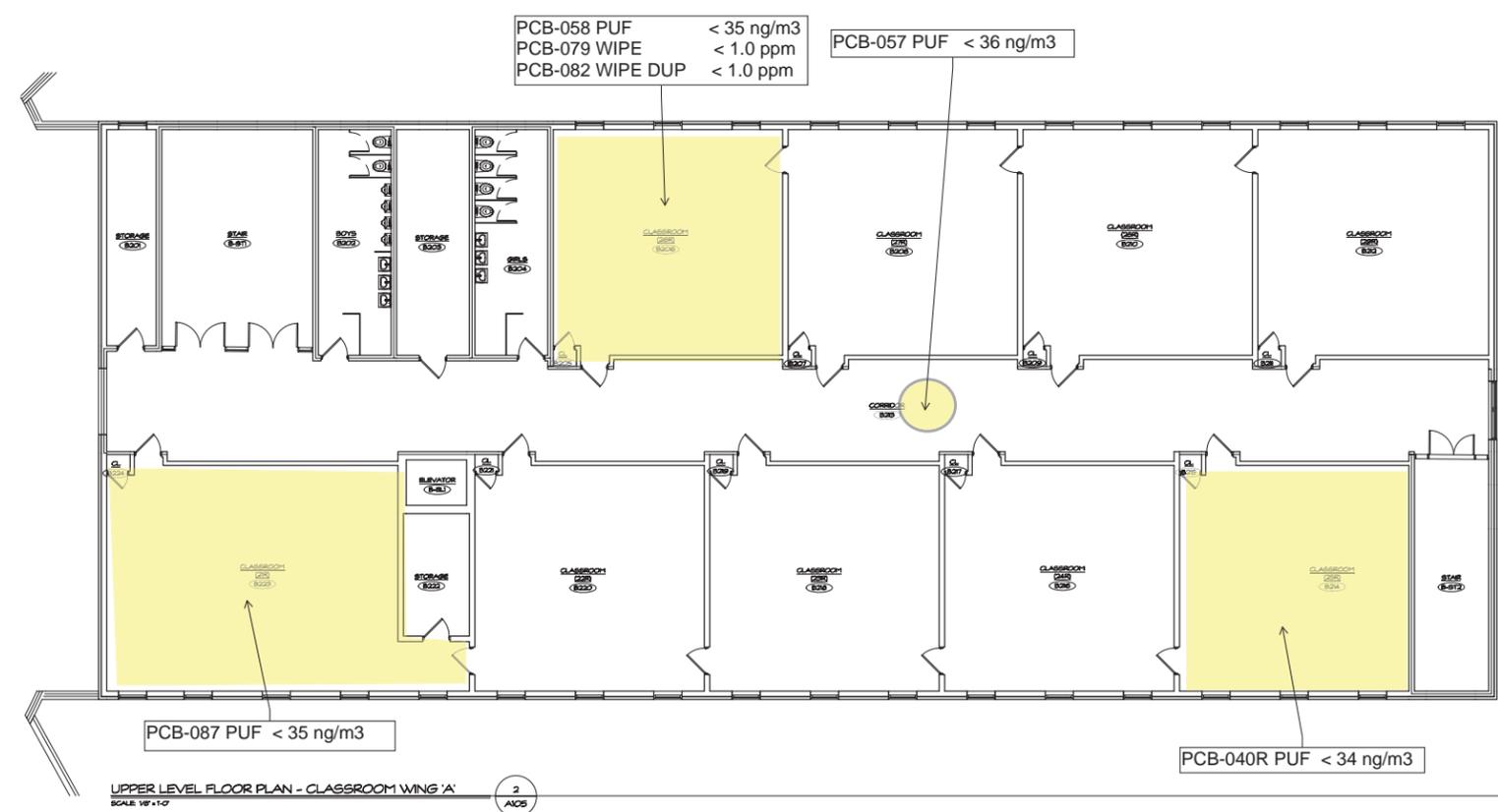
Drawing Title:
 MAIN LEVEL FLOOR PLAN - SHOP WING
BLACK WING - PCB

Date:
 Issue Date
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author
 Project Number:
 Project Number

Drawing Number:
A104



1
 MAIN LEVEL FLOOR PLAN - CLASSROOM WING 'A'
 SCALE 1/8" = 1'-0" AXOS



2
 UPPER LEVEL FLOOR PLAN - CLASSROOM WING 'A'
 SCALE 1/8" = 1'-0" AXOS

Project Title:
 Owner
 Project Name
 Enter address here

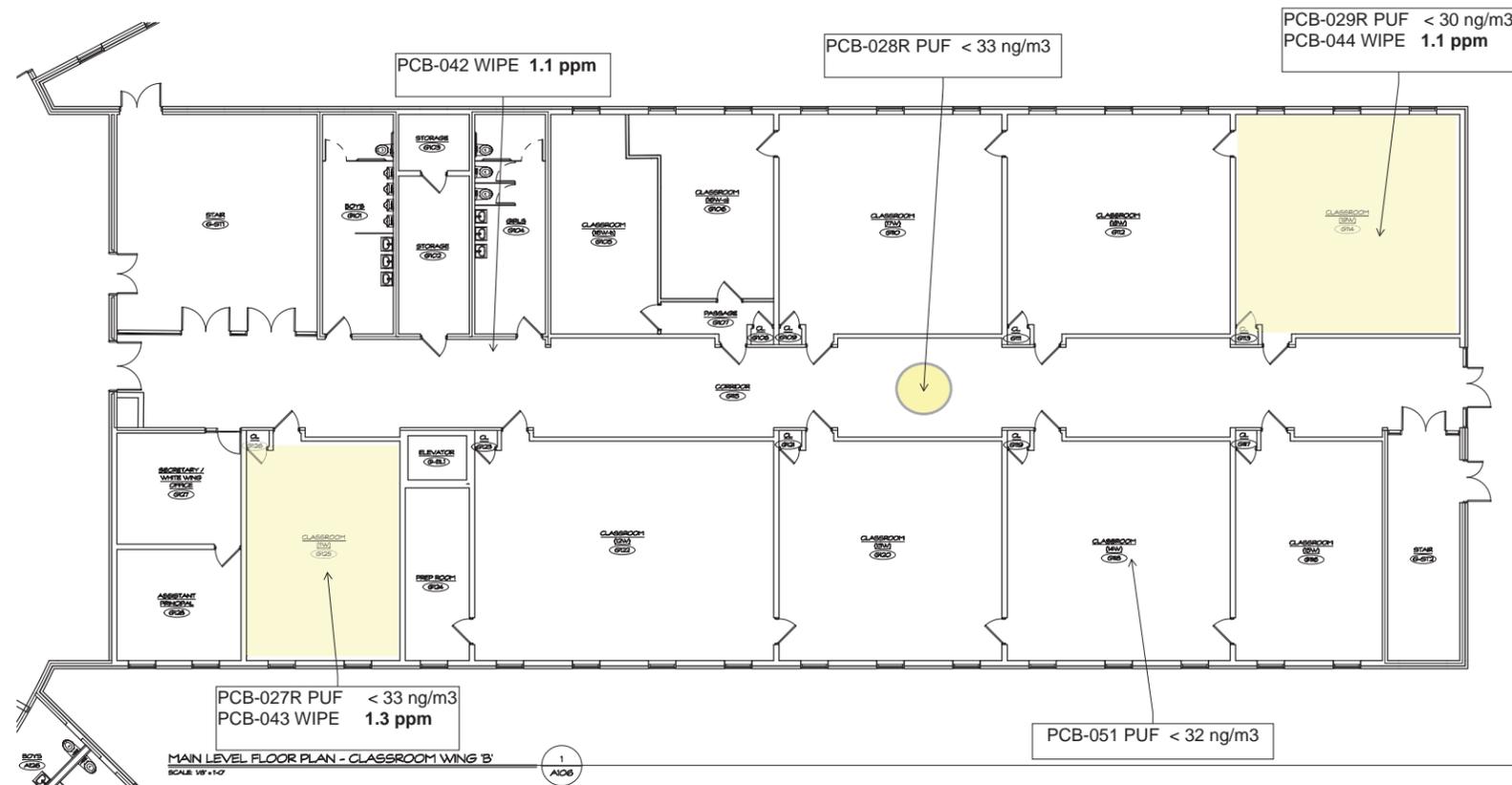


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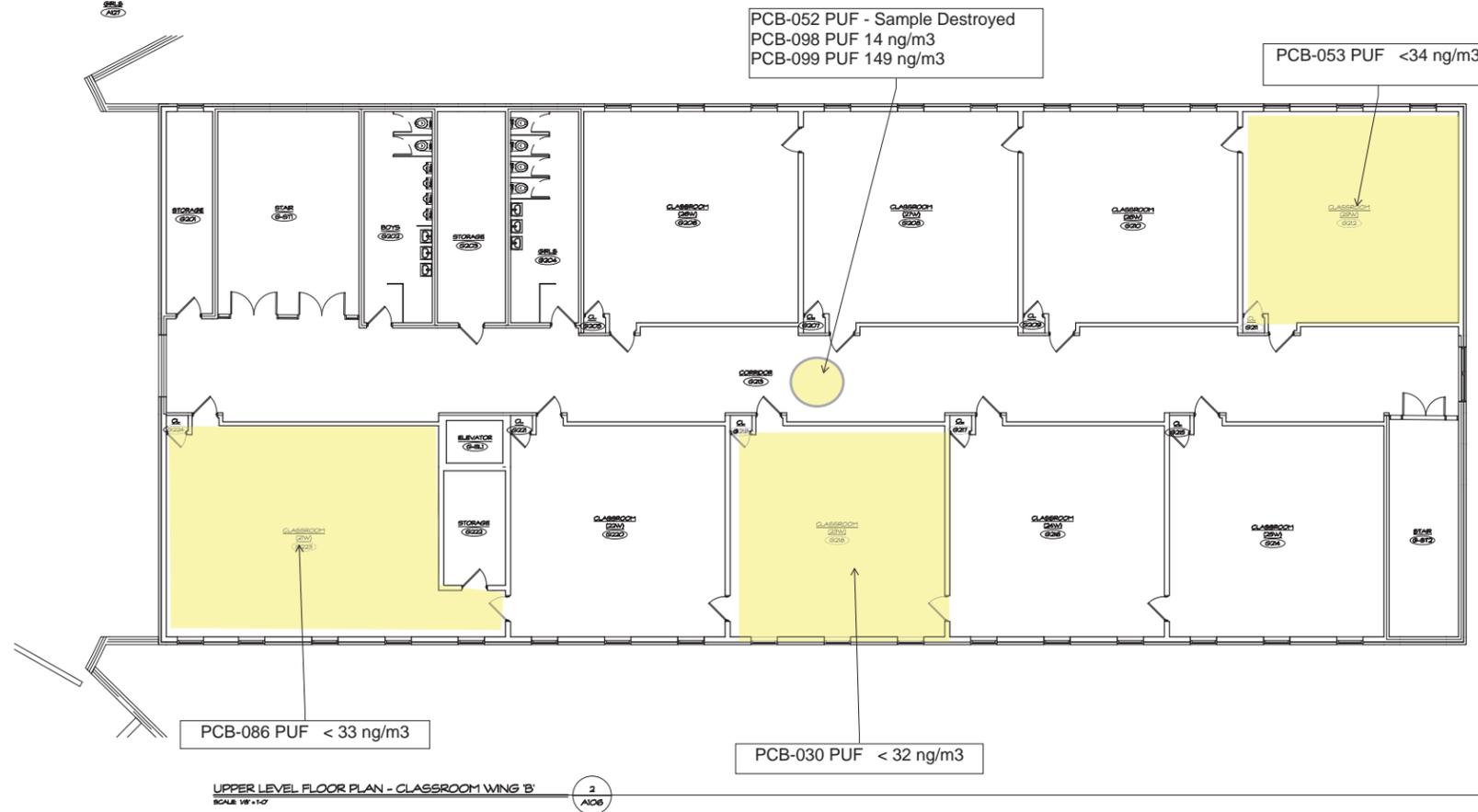
Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN & UPPER LEVEL FLOOR
 PLAN - CLASSROOM WING 'A'
RED WING - PCB

Date:
 Issue Date
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author
 Project Number:
 Drawing Number:
A105



MAIN LEVEL FLOOR PLAN - CLASSROOM WING 'B'
SCALE 1/8" = 1'-0"



UPPER LEVEL FLOOR PLAN - CLASSROOM WING 'B'
SCALE 1/8" = 1'-0"

Project Title:
Owner
Project Name
Enter address here



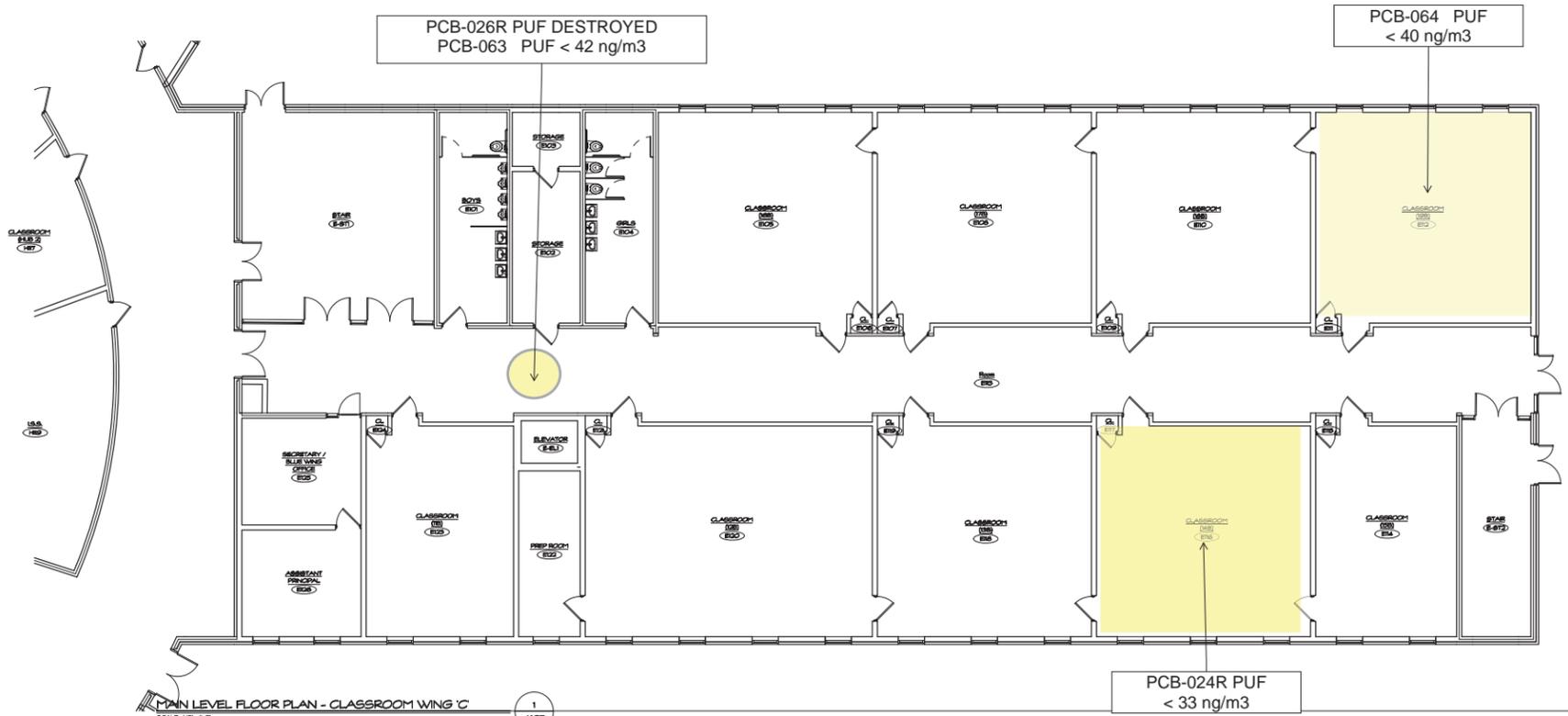
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Revision	Description	Date	Revised By
Δ	XXX	XXX	

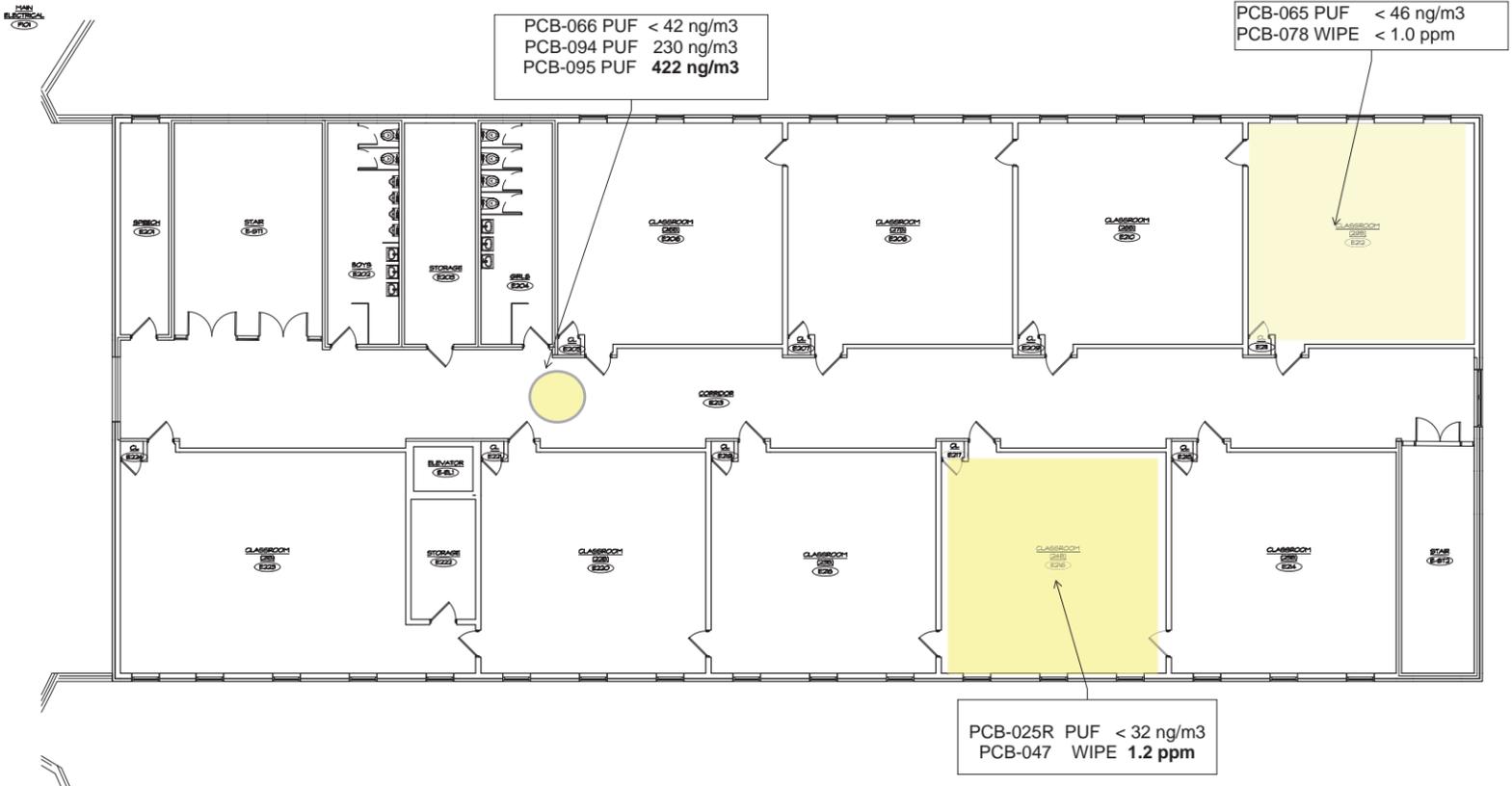
Drawing Title:
MAIN & UPPER LEVEL FLOOR
PLAN - CLASSROOM WING 'B'
WHITE WING - PCB

Date:
Issue Date
Scale:
1/8" = 1'-0"
Drawn By:
Author
Project Number:
Project Number

A106



1
1 A107
MAIN LEVEL FLOOR PLAN - CLASSROOM WING 'C'
SCALE 1/8"=1'-0"



2
2 A107
UPPER LEVEL FLOOR PLAN - CLASSROOM WING 'C'
SCALE 1/8"=1'-0"

SYMBOL LEGEND

- NEW METAL STUD PARTITIONS
- NEW MASONRY WALL (4" BRICK VENEER)
- NEW GFI WALL
- DOOR NUMBER
- WINDOW TYPE
- ROOM NAME
- ROOM NUMBER
- PARTITION TYPE
- CONSTRUCTION NOTE
- ELEVATION SECTION NUMBER
- SHEET NUMBER
- WALL SECTION NUMBER
- SHEET NUMBER
- INTERIOR ELEVATION NUMBER
- SHEET NUMBER
- FIRE EXTINGUISHER CABINET (RECESSED ALL LOCATIONS)
- HANDICAPPED DRINKING FOUNTAIN - SEE 3/A104
- FLOOR DRAIN - SLOPE TILE TO DRAIN
- WHITE BOARD / TACK BOARD / PEG BOARD - REFER TO DRAWING A104

- GENERAL NOTES**
1. READ ALL GENERAL NOTES ON DRAWING A101.
 2. CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS. PATCH TO MATCH ALL EXISTING WALLS AND CEILINGS TO REMAIN AFFECTED BY NEW WORK.
 3. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK, CONCRETE MASONRY UNITS AND METAL FRAMING UNLESS OTHERWISE NOTED.
 4. ALL NEW WALL AND PARTITION ASSEMBLIES SHALL EXTEND TO UNDERSIDE OF DECK UNLESS OTHERWISE NOTED.
 5. PROVIDE GFI WITH PRE-MANUFACTURED BULLNOSE AT ALL EXPOSED CORNERS. WHERE THE WORD "ALIGN" IS INDICATED IT SHALL MEAN TO ALIGN BOTH SIDES OF WALL.

CONSTRUCTION NOTES - PLAN

No.	NOTE

Project Title:
 Owner
 Project Name
 Enter address here



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 Architects / Engineers / Interior Designers
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 Tel. 203 230 9007 Fax. 203 230 8247
 silverpetrucci.com

Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN & UPPER LEVEL FLOOR PLAN - CLASSROOM WING 'C'
BLUE WING - PCB

Date:
 Issue Date
 Scale:
 As Indicated
 Drawn By:
 Author
 Project Number:
 Project Number

A107

Figure 3: PCB Air and Wipes Samples – August 30, 2017

JFK-325 WIPE
None detect

PCB-021R PUF
No Sample
Equipment Malfunction
JFK-272 PUF
None Detect

JFK-324 WIPE
None detect

JFK-323 WIPE
None detect

JFK-271 PUF
None detect

JFK-326 WIPE
None detect

PCB-090 PUF
< 4.2 ng/m³
PCB-091 PUF
250 ng/m³

PCB-020R PUF
< 31 ng/m³

PCB-067 PUF
< 44 ng/m³

PCB-041 WIPE
< 1.0 ug/100cm²

MAIN LEVEL FLOOR PLAN - AUDITORIUM
SCALE: 1/8"=1'-0"

1
AUD

Project Title:
Owner
Project Name
Enter address here

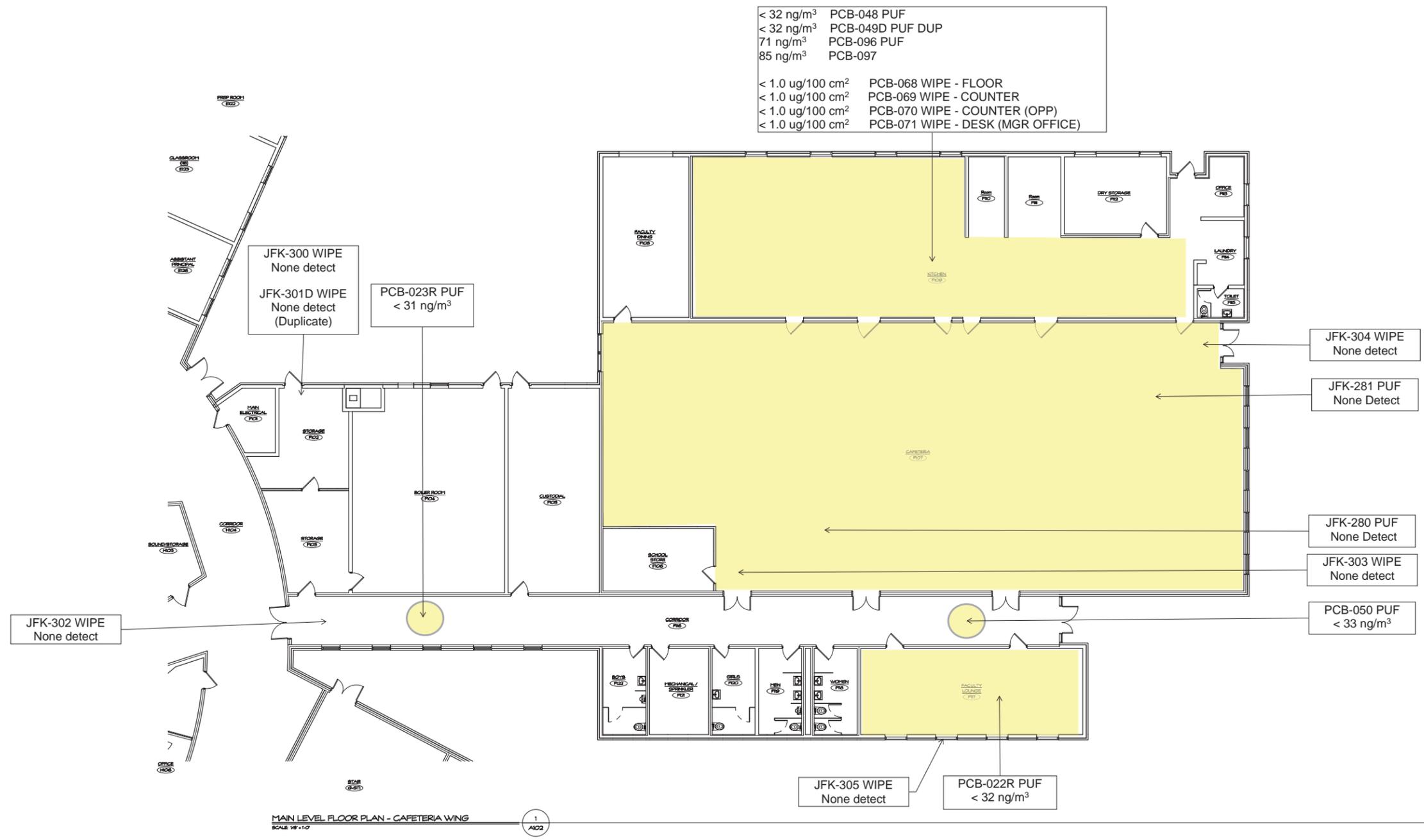


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
MAIN LEVEL FLOOR PLAN -
AUDITORIUM
CENTRAL HUB - PCB

Date:
Issue Date
Scale:
1/8" = 1'-0"
Drawn By:
Author
Project Number
Drawing Number:
A100



Project Title:
 Owner
 Project Name
 Enter address here

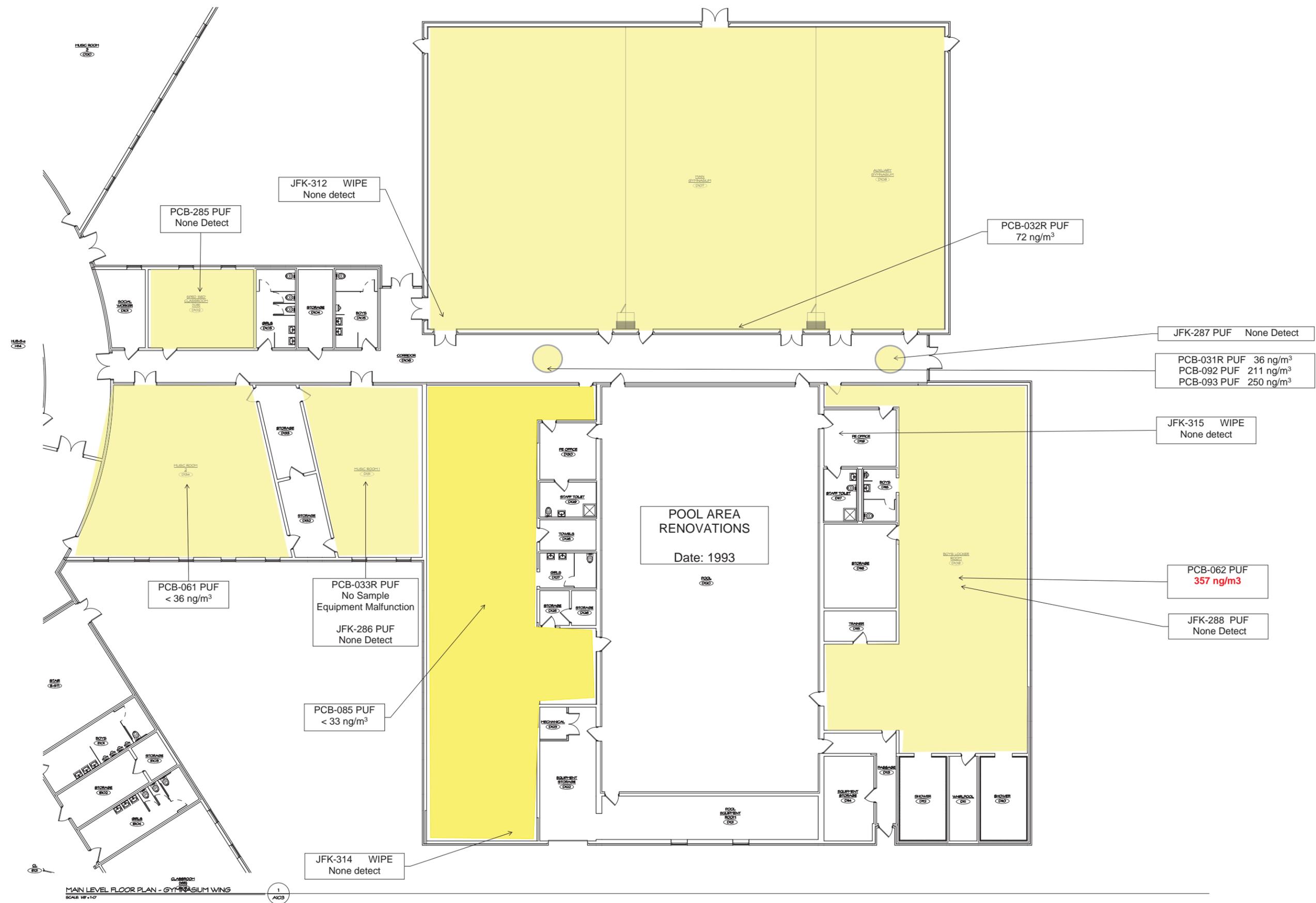


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 CAFETERIA WING
GREEN WING - PCB

Date: _____
 Issue Date: _____
 Scale: 1/8" = 1'-0"
 Drawn By: _____
 Author: _____
 Project Number: _____
 Drawing Number: **A102**



MAIN LEVEL FLOOR PLAN - GYMNASIUM WING
SCALE 1/8" = 1'-0"

Project Title:
 Owner
 Project Name
 Enter address here

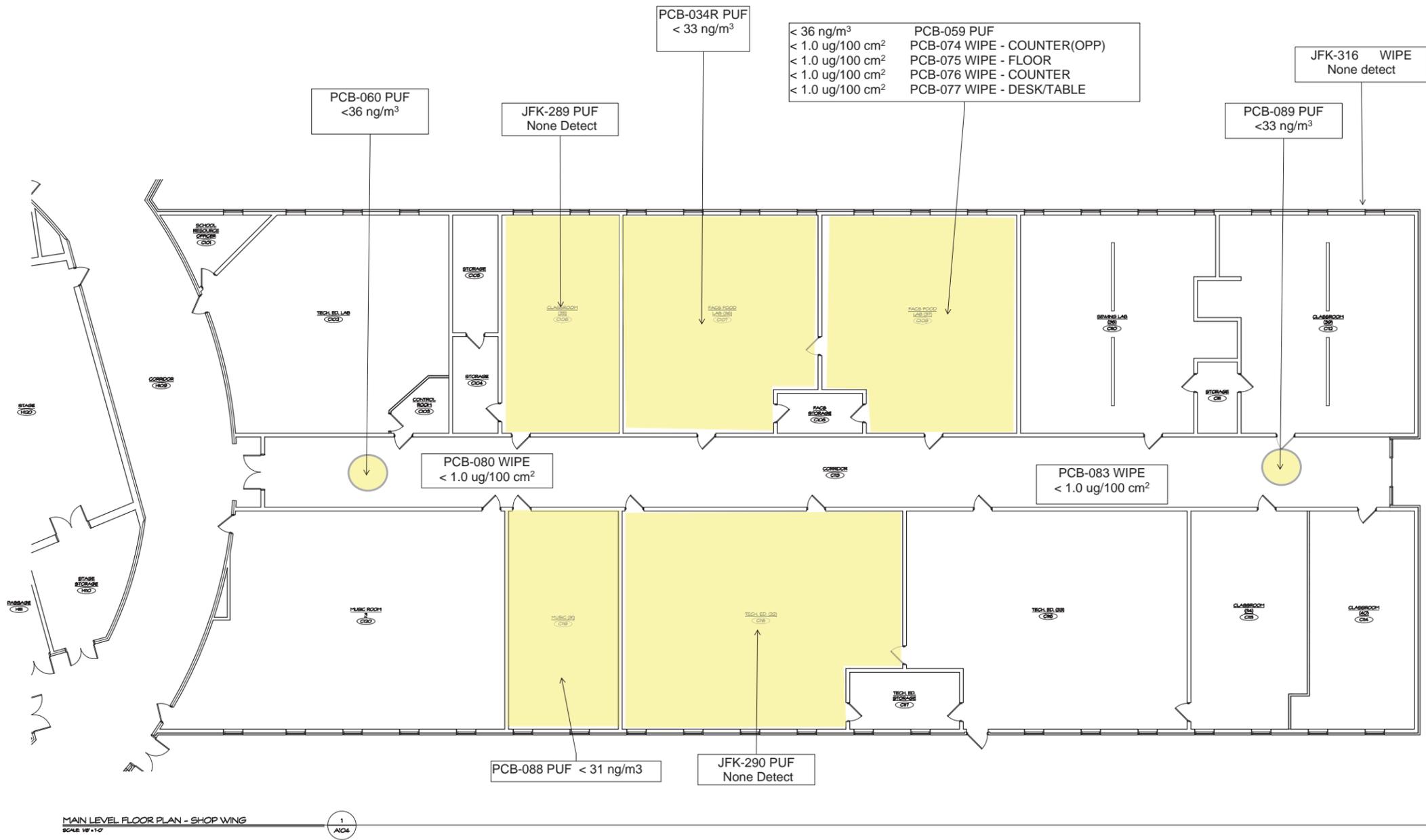


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 GYMNASIUM WING
YELLOW WING - PCB

Issue Date
 Scale: 1/8" = 1'-0"
 Drawn By:
 Author
 Project Number
 Drawing Number: **A103**



Project Title:
 Owner
 Project Name
 Enter address here



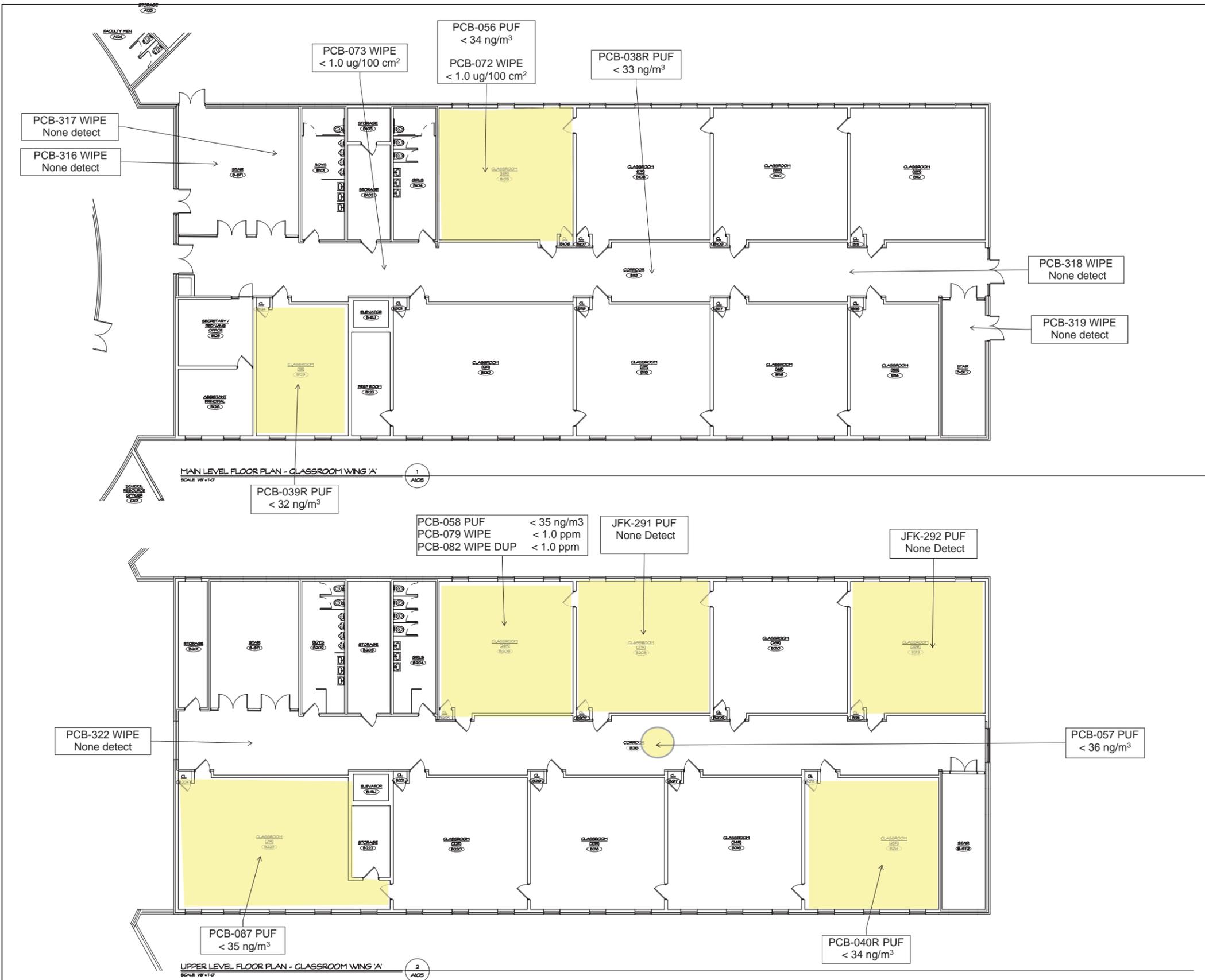
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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN - SHOP WING
BLACK WING - PCB

Date:
 Issue Date
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author
 Project Number:
 Project Number

A104



Project Title:
 Owner
 Project Name
 Enter address here

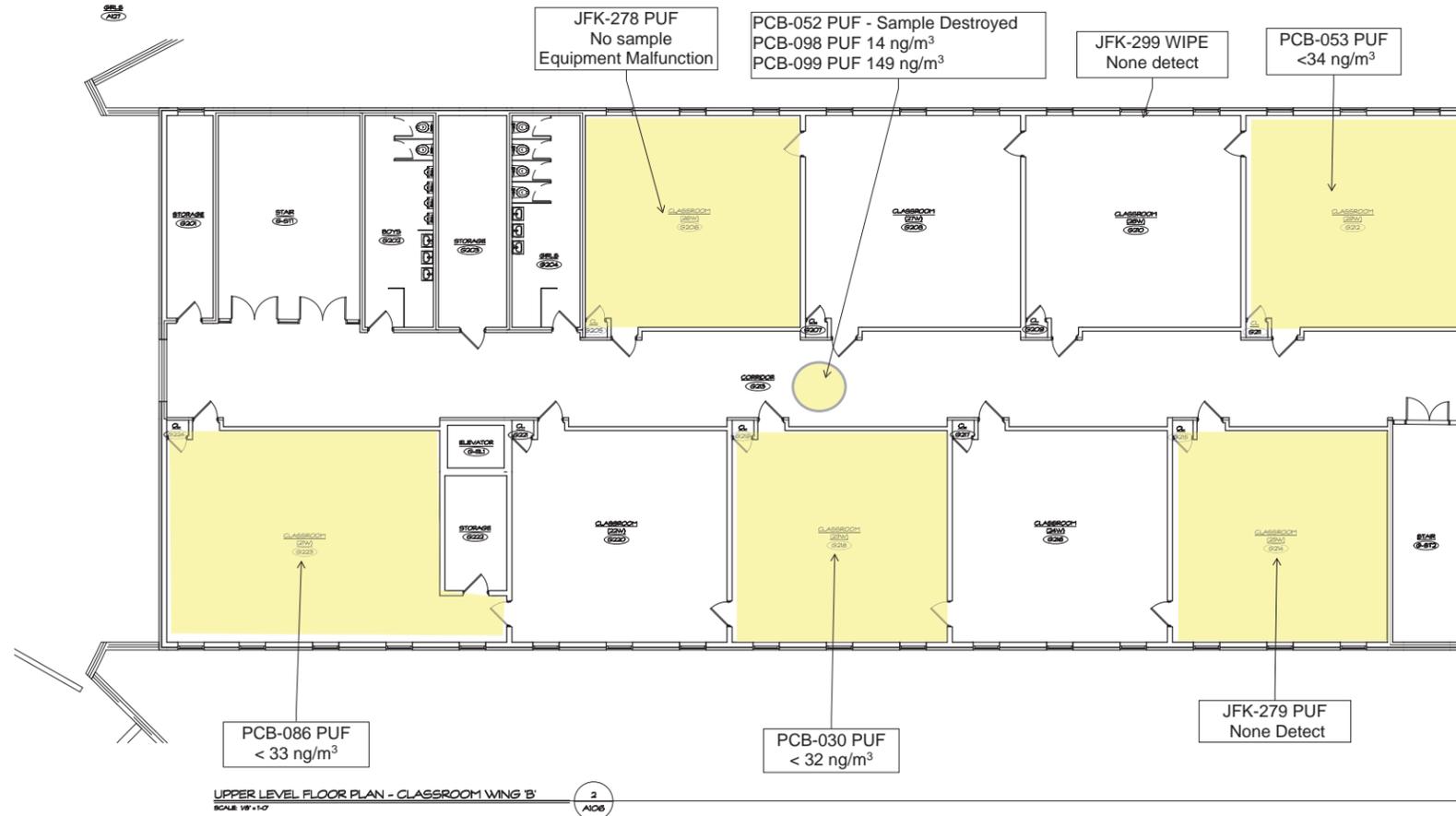
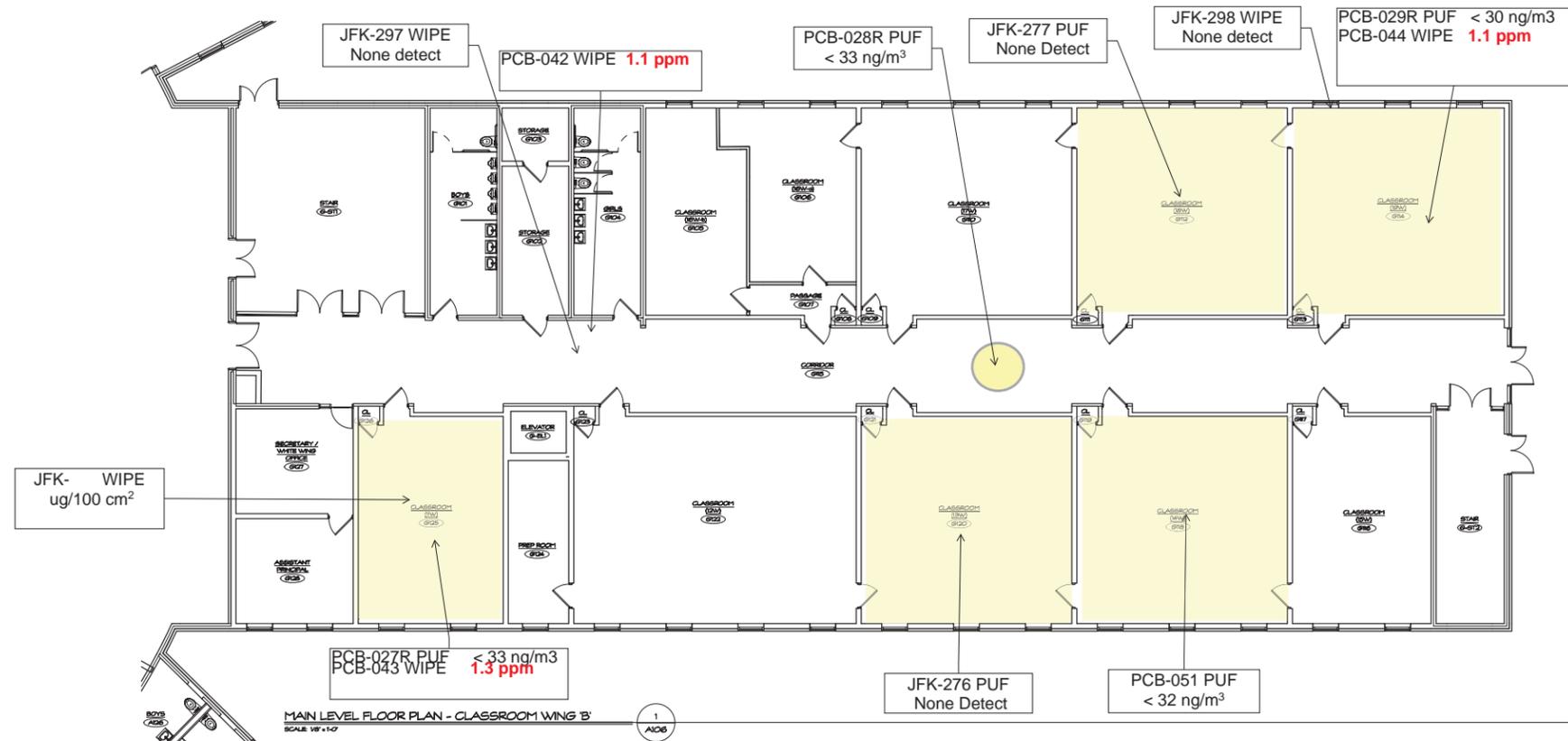


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN & UPPER LEVEL FLOOR
 PLAN - CLASSROOM WING 'A'
RED WING - PCB

Date:
 Issue Date
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author
 Project Number:
 Drawing Number:
A105



Project Title:
Owner
Project Name
Enter address here



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Revision	Description	Date	Revised By
Δ	XXX	XXX	

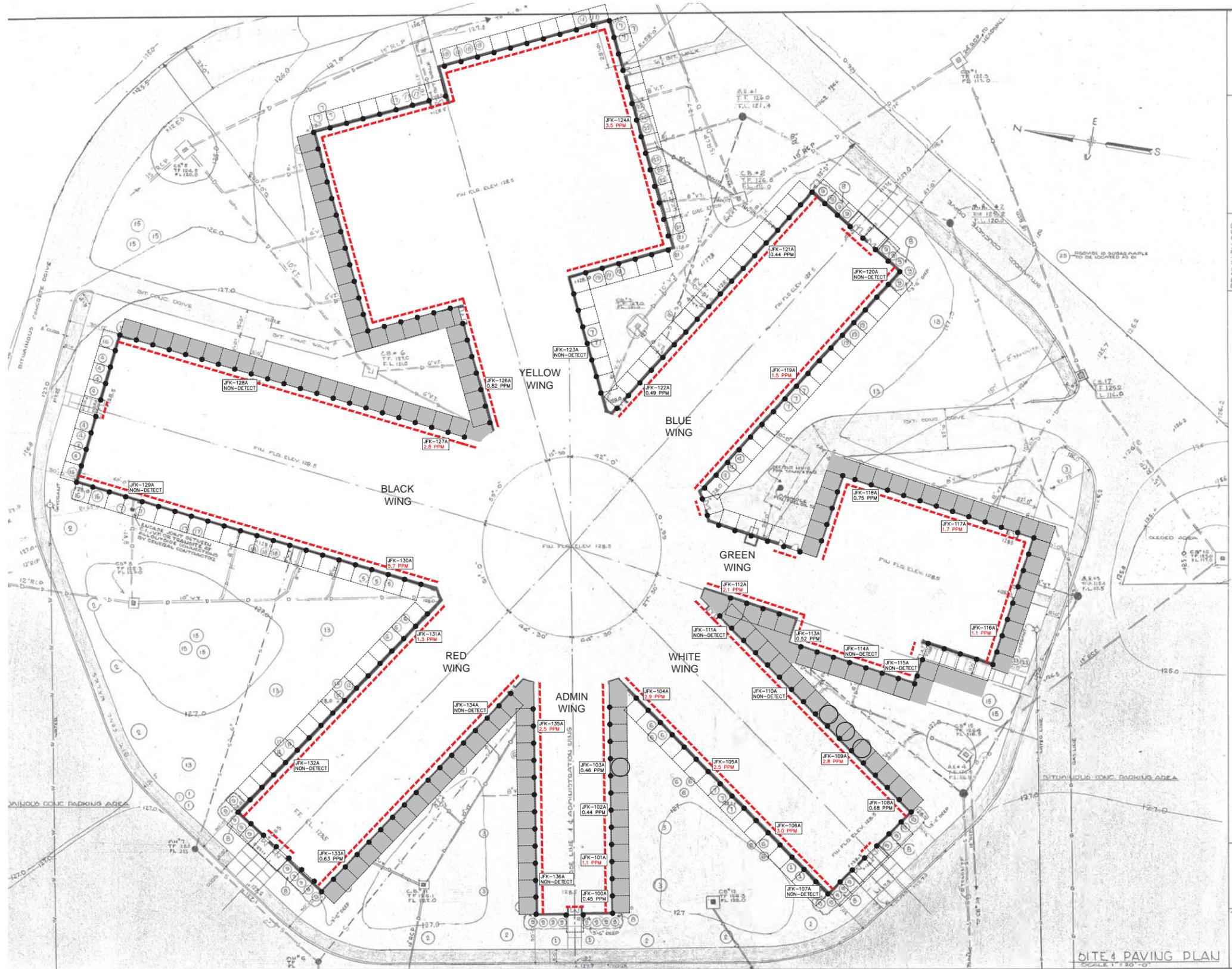
Drawing Title:
MAIN & UPPER LEVEL FLOOR
PLAN - CLASSROOM WING 'B'
WHITE WING - PCB

Date:
Issue Date
Scale:
1/8" = 1'-0"
Drawn By:
Author
Project Number:
Project Number

Drawing Number:
A106

Figure 4: PCB Soil Samples – August 2017

File Path: J:\DWG\2017\08\04\Environmental\Hazmat\20170804\FIG01.dwg Layout: FIGURE 1 Plot: Wed, September 13, 2017, 4:01 PM User: bmcannery
 Plotter: DWG TO PDF.PC3 CTB File: FOCOLOR.ctb
 LAYER STATE:



FIELD QA/QC SAMPLES

PRIMARY SAMPLE ID	TOTAL PCB (PPM)	DUPLICATE ID	TOTAL PCB (PPM)
JFK-100A	< 0.45 PPM	JFK-138 DUP	0.58 PPM
JFK-133A(*)	0.63 PPM	JFK-137 DUP	3.8 PPM

LEGEND

- EXTENT OF PCB CAULKING OBSERVED IN LANDSCAPED AREAS
- TARGETED SPECIFIC AREAS WHERE SIGNIFICANT AMOUNTS OF EXTERIOR CAULKING WERE OBSERVED
- LOCATION OF PROPOSED CHARACTERIZATION SAMPLE
- 10' X 10' GRID
- LOCATION OF EXTERIOR WINDOWS, DOORS, AND LOUVERS

FUSS & O'NEILL EnviroScience, LLC 146 HARTFORD ROAD MANCHESTER, CONNECTICUT 06040 860.666.2400 www.fussandoneill.com	
TOWN OF ENFIELD PRELIMINARY SOIL CHARACTERIZATION SOIL SAMPLE LOCATIONS JOHN F. KENNEDY MIDDLE SCHOOL 155 RAFFIA ROAD ENFIELD, CONNECTICUT	SCALE: HORIZ: N.T.S. VERT: N.T.S. DATUM: NAD 83 HORIZ: N.T.S. VERT: N.T.S.
SEAL SEAL	SEAL SEAL
NO. 1 DATE	DESCRIPTION
PROJ. No.: 20170804.A4E DATE: 09/13/2017	
FIGURE 1	

Appendix A

Contact Information for Employees



**John F. Kennedy Middle School
155 Raffia Road
Enfield, Connecticut**

O&M Program Contact Information

To implement this Operations and Maintenance (O&M) Program, The Town of Enfield has assigned the following:

PCB Program Coordinator:

Gregg Gabinelle, Deputy Director
Enfield Department of Public Works
40 Moody Rd.
Enfield, CT 06082
Email: ggabinelle@enfield.org
Phone: 860-763-8806

PCB Project Manager:

Mark Gahr, Facilities Manager
Enfield Department of Public Works
40 Moody Rd.
Enfield, CT 06082
Email: mgahr@enfield.org
Phone: 860-253-6361

Custodial Services Crew Leader (1st shift):

Ken Kido
Enfield Department of Public Works
40 Moody Rd.
Enfield, CT 06082
Email: dkido@enfield.org
Phone: 860-253-6514

Custodial Services Crew Leader (2nd shift):

Richard Deroy
Enfield Department of Public Works
40 Moody Rd
Enfield, CT 06082
Email: rderoy@enfield.org
Phone: 860-253-6514



Appendix B

Inventory of Identified PCBs



Inventory of Identified PCBs

	Configuration	Description	Sample ID	Sample Date	Total PCBs (ppm)
Exterior Windows, Louvers, Vents and Sills					
	Metal window frame to exterior brick façade and steel lintel (All window configurations throughout original building)	½", white/light grey, hard, heavily weathered	PCB-01A	3/29/2017	5.8
			PCB-01B	3/29/2017	3.2
			PCB-01C	3/29/2017	2.3
	Metal window frame to exterior brick façade and steel lintel (Repair Caulking at Type 3 windows)	¼", light grey/off-white, hard, brittle	PCB-02A	3/29/2017	1,100
			PCB-02B	3/29/2017	50,000
			PCB-02C	3/29/2017	15
	Metal window frame to exterior brick façade and steel lintel (Repair Caulking at Type 6 windows)	½" light grey/brown, soft, flexible	PCB-03A	3/29/2017	2.5
			PCB-03B	3/29/2017	4,800
	Pre-cast concrete sill to exterior brick façade (All window configurations throughout original building)	½", white, oxidized, medium hard	PCB-04A	3/29/2017	36,000
			PCB-04B	3/29/2017	21,000
			PCB-04C	3/29/2017	4.5
	Pre-cast concrete sill to exterior brick façade (Repair Caulking at Type 3 windows)	½", light grey/brown, soft, flexible	PCB-03C	3/29/2017	29,000
	Metal window frame to glass pane (All window configurations throughout original building)	¼" - 1", white, hard, heavily weathered	PCB-05A	3/29/2017	2.8
			PCB-05B	3/29/2017	0.62
			PCB-05C	3/29/2017	1.8
	Metal door frame to exterior brick façade (Type 1 and 2 Exterior Doors)	½", light grey/brown, soft, flexible	PCB-07A	3/29/2017	ND
			PCB-07B	3/29/2017	2.4
			PCB-07C	3/29/2017	0.96
Exterior Windows, Louvers, Vents and Sills					
	Metal door frame to exterior brick façade (Type 3 Exterior Doors)	½", white, brittle	PCB-08A	3/29/2017	2.8
			PCB-08B	3/29/2017	5.8
			PCB-08C	3/29/2017	ND
	Metal door frame to exterior brick façade (Type 4 Exterior Doors)	3/8", light tan, hard, (painted)	PCB-09A	3/29/2017	1.4
			PCB-09B	3/29/2017	4
			PCB-09C	3/29/2017	3.3
	Exterior Expansion Joints within Brick Facade	½", light grey/off-white soft, flexible	PCB-10A	4/14/2017	11,000
			PCB-10B	4/14/2017	29,000
	Exterior Expansion Joints within Brick Facade	white/light grey, hard heavily weathered		4/14/2017	
			PCB-11A	4/14/2017	58,000
			PCB-11B	4/14/2017	41,000
			PCB-11C	4/14/2017	79,000

	Configuration	Description	Sample ID	Sample Date	Total PCBs (ppm)
Food Labs Room 36/37					
	Interior Caulking at Backsplashes, Sinks and Countertops	½", white, soft, flexible	PCB-12A	4/14/2017	11
			PCB-12B	4/14/2017	7.9
			PCB-12C	4/14/2017	4.7
Interior Partition Door and Window Assembly					
	Interior Glazing between Metal Frame and Masonry Wall	½", black, flexible, soft, sticky	PCB-13A	4/14/2017	8.4
			PCB-13B	4/14/2017	8.7
			PCB-13C	4/14/2017	11
Interior Masonry Joints					
	Vertical control Joints throughout Hallways and gymnasium Masonry Walls to Concrete Column	½", light grey, soft, flexible (foam backing within joint)	PCB-14A	4/14/2017	76,000
			PCB-14B	4/14/2017	110,000
			PCB-14C	4/14/2017	77,000
Exterior Windows					
	Interior Caulking at Exterior Windows	1/2", off-white/ light grey, hard, brittle	PCB-15A	4/14/2017	4
			PCB-15B	4/14/2017	25
			PCB-15C	4/14/2017	3.6

Appendix C

PCB Air, Wipe, and Soil Sampling Results



Table 1
Summary of Initial Indoor Air Sample Results – May 25 and June 2, 2017

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration (min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
May 25, 2017											
PCB-048	Green Wing – 1 st Floor Kitchen	05/25/17	3.888	3.954	3.921	9:02	15:00	358	1404	< .032	< 32
PCB-049	Green Wing – 1 st Floor Kitchen Duplicate	05/25/17	4.044	3.922	3.983	9:04	15:02	358	1426	< .032	< 32
PCB-050	Green Wing – 1 st Hallway	05/25/17	3.898	3.87	3.884	9:10	15:04	354	1375	< .033	< 33
PCB-051	White Wing – 1 st Floor Classroom	05/25/17	3.948	3.914	3.931	9:15	15:10	355	1396	< .032	< 32
PCB-052	White Wing – 2 nd Floor Hall	05/25/17	4.342	Sample Destroyed		9:26	No Sample - PUF Glass Vessel Destroyed				
PCB-053	White Wing – 1 st Floor Classroom	05/25/17	3.842	3.832	3.837	9:35	15:20	345	1324	< .034	< 34
PCB-054	Admin Wing – 1 st Floor Office	05/25/17	4.173	4.115	4.144	9:48	15:25	337	1397	< .032	< 32
PCB-055	Admin Wing – Hall	05/25/17	4.142	4.091	4.117	9:56	15:26	330	1359	< .033	< 33
PCB-056	Red Wing – 1 st Floor Classroom	05/25/17	3.957	3.971	3.964	10:00	15:30	330	1308	< .034	< 34
PCB-057	Red Wing – 2 nd Floor Hall	05/25/17	3.624	3.97	3.797	10:06	15:32	326	1238	< .036	< 36
PCB-058	Red Wing – 2 nd Floor Classroom	05/25/17	3.912	4.004	3.958	10:13	15:40	327	1294	< .035	< 35
PCB-059	Black Wing – 1 st Floor Food Lab 37	05/25/17	3.858	4.008	3.933	10:23	15:43	320	1259	< .036	< 36
PCB-060	Black Wing – 1 st Floor Hall	05/25/17	3.962	3.887	3.925	10:30	15:46	316	1240	< .036	< 36
PCB-061	Yellow Wing – 1 st Floor Music Room	05/25/17	4.044	4.057	4.051	10:43	15:50	307	1244	< .036	< 36
PCB-062	Yellow Wing – 1 st Floor Boys' Locker Room	05/25/17	3.794	3.807	3.801	10:46	15:52	306	1163	0.357	357
PCB-063	Blue Wing – 1 st Floor Hallway	05/25/17	3.096	4.108	3.602	11:06	16:00	294	1059	< .042	< 42
PCB-064	Blue Wing – 1 st Floor Classroom	05/25/17	4.109	3.737	3.923	11:13	16:02	289	1134	< .040	< 40

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration (min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
PCB-065	Blue Wing – 2 nd Floor Classroom	05/25/17	3.157	3.832	3.495	11:31	16:10	279	975	< .046	< 46
PCB-066	Blue Wing – 2 nd Floor Hall	05/25/17	3.954	3.836	3.895	11:37	16:14	277	1079	< .042	< 42
PCB-067	Central Hub – Robotics/Mac Lab	05/25/17	3.652	3.905	3.779	11:46	16:17	271	1024	< .044	< 44
PCB-084	Field Blank	05/25/17			0				0	< .045	< 45
June 2, 2017											
PCB-020R	Central Hub – Auditorium	06/02/17	4.038	4.081	4.06	7:45	13:40	355	1441	< 0.031	< 31
PCB-021R	Central Hub – Classroom Hub 2	06/02/17	No Sample - Equipment Malfunction								
PCB-022R	Green Wing – 1 st Floor Faculty Lounge	06/02/17	3.945	4.045	4.00	7:53	13:42	349	1394	< 0.32	< 32
PCB-023R	Green Wing – 1 st Floor Hallway	06/02/17	4.123	4.126	4.12	7:56	13:43	347	1431	< 0.031	< 31
PCB-024R	Blue Wing – 1 st Floor Classroom	06/02/17	4.003	3.955	3.98	8:04	13:50	346	1377	< 0.033	< 33
PCB-025R	Blue Wing – 2 nd Floor Classroom	06/02/17	4.123	4.073	4.10	8:06	13:52	346	1418	< 0.032	< 32
PCB-026R	Blue Wing – 2 nd Floor Hallway	06/02/17	No Sample - PUF Glass Vessel Destroyed								
PCB-027R	White Wing – 1 st Floor Classroom	06/02/17	3.907	3.938	3.92	8:14	14:00	346	1357	< 0.033	< 33
PCB-028R	White Wing – 1 st Floor Hallway	06/02/17	3.967	3.996	3.98	8:16	14:02	346	1378	< 0.033	< 33
PCB-029R	White Wing – 1 st Floor Classroom	06/02/17	4.237	4.294	4.27	8:18	14:05	347	1480	< 0.030	< 30
PCB-030R	White Wing – 2 nd Floor Classroom	06/02/17	4.008	4.009	4.01	8:20	14:08	348	1395	< 0.032	< 32
PCB-031R	Yellow Wing – 1 st Floor Hallway	06/02/17	4.44	4.421	4.43	8:32	14:15	343	1520	0.036	36
PCB-032R	Yellow Wing – Gymnasium	06/02/17	4.049	4.006	4.03	8:40	14:16	336	1353	0.072	72
PCB-033R	Yellow Wing – 1 st Floor Classroom Music	06/02/17	No Sample - Equipment Malfunction								
PCB-034R	Black Wing – 1 st Floor Food Lab 36	06/02/17	4.033	4.006	4.02	8:50	14:26	336	1351	< 0.033	< 33

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration (min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
PCB-035R	Admin Wing – 1 st Floor Office	06/02/17	4.076	4.11	4.09	8:51	14:32	341	1396	< 0.032	< 32
PCB-036R	Admin Wing – 1 st Floor Hall	06/02/17	4.075	4.116	4.10	9:02	14:35	333	1364	< 0.033	< 33
PCB-037R	Admin Wing – Office	06/02/17	4.067	4.112	4.09	9:05	14:36	331	1354	< 0.033	< 33
PCB-038R	Red Wing – 1 st Floor Hallway	06/02/17	4.135	4.114	4.12	9:15	14:42	327	1349	< 0.033	< 33
PCB-039R	Red Wing – 1 st Floor Classroom	06/02/17	4.228	4.28	4.25	9:10	14:40	330	1404	< 0.032	< 32
PCB-040R	Red Wing – 2nd Floor Classroom	06/02/17	4.124	4.138	4.13	9:20	14:45	325	1343	< 0.034	< 34
PCB-085	Yellow Wing - 1st Floor Girls Locker Room	06/02/17	4.107	3.941	4.02	8:45	14:20	335	1348	< 0.033	< 33
PCB-086	White Wing - 2nd Floor Classroom	06/02/17	3.906	3.891	3.90	8:22	14:12	350	1364	< 0.033	< 33
PCB-087	Red Wing - 2nd Floor Classroom	06/02/17	3.992	3.908	3.95	9:25	14:47	322	1272	< 0.035	< 35
PCB-088	Black Wing - 1st Floor Classroom	06/02/17	4.255	4.242	4.25	9:30	15:15	345	1466	< 0.031	< 31
PCB-089	Black Wing - 1st Floor Hallway	06/02/17	4.033	4.06	4.05	8:50	14:30	340	1376	< 0.033	< 33

Bold denotes indoor air sample result reported above laboratory detection limit of 0.045 nanograms per cubic meter.

1. Air samples collected in accordance with USEPA Compendium Method TO-10A and submitted for laboratory analysis of PCBs homologs by EPA 680 Method.
2. Average local weather conditions during the sampling period were 22.8°C and 30.07 in Hg
3. "R" Suffix denotes samples recollected on June 2, 2017 at locations for May 24, 2017 event.
4. Exterior windows observed open throughout various locations in multiple wings for duration of indoor air sampling event.

Table 2
Summary of Settled Dust Wipes

Sample ID	Sample Location	Sample Date	Total PCBs	Aroclor
			µg/100 cm ²	
Window Sills				
PCB-043	White Wing - 1st Floor Classroom - Window Sill	05/24/17	1.3	1254
PCB-044	White Wing - 1st Floor Classroom - Window Sill	05/24/17	1.1	1254
PCB-045	Admin Wing - 1st Floor Office - Window Sill	05/24/17	1.1	1254
PCB-046	Admin Wing - 1st Floor Classroom - Window Sill	05/24/17	1.4	1254
PCB-047	Blue Wing - 2nd Floor Classroom - Window Sill	05/24/17	1.2	1254
PCB-072	Red Wing - 1st Floor Classroom - Window Sill	05/25/17	< 1.0	

Sample ID	Sample Location	Sample Date	Total PCBs	Aroclor
			µg/100 cm ²	
PCB-078	Blue Wing - 2nd Floor Classroom - Window Sill	05/25/17	< 1.0	
PCB-079	Red Wing - 2nd Floor Classroom - Window Sill	05/25/17	< 1.0	
Base of Hallway Expansion Joints				
PCB-041	Central Hub - 1st Floor Hallway - Base of expansion joint	05/24/17	< 1.0	
PCB-042	White Wing - 1st Floor Hallway - Base of expansion joint	05/24/17	1.1	1254
PCB-073	Red Wing - 1st Floor Hallway - Base of expansion joint	05/25/17	< 1.0	
PCB-080	Black Wing - 1st Floor Hallway - Base of expansion Joint	05/25/17	< 1.0	
PCB-083	Black Wing - 1st Floor Hallway - Base of expansion Joint	05/25/17	< 1.0	
Food Handling Areas				
PCB-068	Green Wing – 1st Floor Kitchen - Floor	05/25/17	< 1.0	
PCB-069	Green Wing – 1st Floor Kitchen - Counter(at Window)	05/25/17	< 1.0	
PCB-070	Green Wing – 1st Floor Kitchen - Counter (at Cashier)	05/25/17	< 1.0	
PCB-071	Green Wing – 1st Floor Kitchen - Desk(Manager's Office)	05/25/17	< 1.0	
PCB-074	Black Wing - 1st Floor Classroom - Food Lab Rm 37 - Counter(at Window)	05/25/17	< 1.0	
PCB-075	Black Wing - 1st Floor Classroom - Food Lab Rm 37 - Floor	05/25/17	< 1.0	
PCB-076	Black Wing - 1st Floor Classroom - Food Lab Rm 37 - Counter(Station by Teacher's Desk)	05/25/17	< 1.0	
PCB-077	Black Wing - 1st Floor Classroom - Food Lab Rm 37 - Desk/Table	05/25/17	< 1.0	
Field QA/QC				
PCB-081	Field Blank	05/25/17	< 1.0	
PCB-082D	Red Wing - 2nd Floor Classroom - Window Sill Duplicate	05/25/17	< 1.0	

Bold denotes settled dust wipe sample reported above laboratory detection limit of 1 ppm per 100 cm².

1. Hexane wipe samples collected in accordance with US EPA protocol.
2. Samples submitted to Phoenix Environmental Laboratory of Manchester, CT under standard chain of custody.
3. Wipe samples analyzed by EPA 8082 analysis with 3540C Soxhlet extraction.

Table 3
Summary of Indoor Air Sample Results June 23, 2017

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration(min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
PCB-090	Central Hub – 1st Floor Hallway	06/23/17	3.997	3.879	3.938	11:56	17:00	304	1197	< 0.0042	< 4.2
PCB-091	Central Hub – 1st Floor Hallway	06/23/17	4.114	4.024	4.069	11:59	17:02	303	1233	0.250	250
PCB-092	Yellow Wing - 1st Floor Hallway	06/23/17	3.897	3.784	3.841	12:05	17:06	301	1156	0.211	211
PCB-093	Yellow Wing - 1st Floor Hallway	06/23/17	3.964	3.981	3.973	12:03	17:08	305	1212	0.250	250
PCB-094	Blue Wing – 2nd Floor Hallway	06/23/17	4.009	3.922	3.966	12:13	17:16	303	1202	0.230	230

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration(min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
PCB-095	Blue Wing – 2nd Floor Hallway	06/23/17	3.945	3.962	3.954	12:16	17:17	301	1190	0.422	422
PCB-096	Green Wing – 1st Floor Kitchen	06/23/17	3.990	3.974	3.982	12:23	17:26	303	1207	0.071	71
PCB-097	Green Wing – 1st Floor Kitchen	06/23/17	3.925	3.958	3.942	12:24	17:27	303	1194	0.085	85
PCB-098	White Wing – 2nd Floor Hallway	06/23/17	3.745	3.794	3.770	12:34	17:36	302	1139	0.140	140
PCB-099	White Wing – 2nd Floor Hallway	06/23/17	3.798	3.972	3.885	12:32	17:37	305	1185	0.149	149

Bold denotes indoor air sample result reported above laboratory detection limit of 0.045 nanograms per cubic meter.

1. Air samples collected in accordance with USEPA Compendium Method TO-10A and submitted for laboratory analysis of PCBs homologs by EPA 680 Method.
2. Average local weather conditions during the sampling period were 28.6°C and 29.79 in Hg
3. Exterior windows and doors were closed for duration of indoor air sampling event.

Table 4: Summary of Confirmatory Indoor Air Sample Results – August 30, 2017

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration(min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
Central Hub											
JFK-271	Central Hub - Hallway	08/30/17	3.908	4.044	3.976	10:53	17:50	417	1658	< 0.045	< 45
JFK-272	Central Hub - Classroom Hub 2	08/30/17	3.783	3.925	3.879	10:56	17:54	418	1621	< 0.045	< 45
Administration Wing											
JFK-273	Admin Wing - 1st Floor Office	08/30/17	3.806	3.953	3.88	10:59	17:58	419	1626	< 0.045	< 45
JFK-274	Admin Wing - 1st Floor Office	08/30/17	4.502	4.1	4.30	11:03	18:03	420	1806	< 0.045	< 45
JFK-275	Admin Wing - 1st Floor Office	08/30/17	3.917	4.012	3.97	11:06	18:07	421	1669	< 0.045	< 45

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration(min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
White Wing											
JFK-276	White Wing - 1st Floor Classroom	08/30/17	3.936	3.973	3.955	11:09	18:13	424	1677	< 0.045	< 45
JFK-277	White Wing - 1st Floor Classroom	08/30/17	3.900	3.920	3.910	11:13	18:17	424	1658	< 0.045	< 45
JFK-278	White Wing - 2nd Floor Classroom	08/30/17	No Sample - Equipment Malfunction								
JFK-279	White Wing - 2nd Floor Classroom	08/30/17	3.967	3.948	3.958	11:19	18:27	428	1694	< 0.045	< 45
Green Wing											
JFK-280	Green Wing - Cafeteria West	08/30/17	3.874	3.917	3.896	11:22	18:32	430	1675	< 0.045	< 45
JFK-281	Green Wing - Cafeteria East	08/30/17	3.834	3.879	3.857	11:25	18:37	408	1574	< 0.045	< 45
Blue Wing											
JFK-282	Blue Wing - 1st Floor Classroom	08/30/17	3.824	3.872	3.848	11:37	18:46	411	1582	< 0.045	< 45
JFK-283	Blue Wing - 1st Floor Classroom	08/30/17	3.986	4.037	4.012	11:39	18:57	438	1757	< 0.045	< 45
JFK-284	Blue Wing - 2nd Floor Hallway	08/30/17	3.937	4.012	3.975	11:40	17:00	440	1749	< 0.045	< 45
Yellow Wing											
JFK-285	Yellow Wing - 1st Floor Classroom	08/30/17	4.117	4.148	4.133	11:50	19:08	438	1810	< 0.045	< 45
JFK-286	Yellow Wing - 1st Floor Classroom	08/30/17	3.902	3.916	3.909	11:54	19:22	448	1751	< 0.045	< 45

Sample ID	Sample Location	Date	Flow Rate (lpm)			Duration(min)			Volume (L)	PCB Concentration	
			Start	End	Avg.	Start	End	Total		µg/m ³	ng/m ³
JFK-287	Yellow Wing - 1st Floor Hallway	08/30/17	3.553	3.972	3.763	11:52	19:17	445	1675	< 0.045	< 45
JFK-288	Yellow Wing - 1st Floor Boys Locker Room	08/30/17	3.823	3.851	3.837	11:57	19:14	437	1677	< 0.045	< 45
Black Wing											
JFK-289	Black Wing - 1st Floor Classroom	08/30/17	3.559	3.501	3.53	12:10	19:26	436	1539	< 0.045	< 45
JFK-290	Black Wing - 1st Floor Classroom	08/30/17	4.178	3.801	3.99	12:20	19:30	430	1716	< 0.045	< 45
Red Wing											
JFK-291	Red Wing - 2nd Floor Classroom	08/30/17	No Sample - Equipment Malfunction								
JFK-292	Red Wing - 2nd Floor Classroom	08/30/17	3.454	3.532	3.49	12:30	19:40	430	1502	< 0.045	< 45
Field QA/QC Samples											
JFK-293	Blue Wing - 1st Floor Classroom Duplicate	08/30/17	3.618	3.761	3.69	11:38	18:48	430	1587	< 0.045	< 45
JFK-328	Field Blank	08/30/17			0				0	< 0.045	< 45

< denotes air sample was reported as non-detect for PCB Homologs at the laboratory reporting limit. Displayed value is laboratory reporting limit adjusted for sample volume.

Bold denotes indoor air sample result reported above laboratory detection limit of 0.045 nanograms per cubic meter.

1. Air samples collected in accordance with USEPA Compendium Method TO-10A and submitted for laboratory analysis of PCBs homologs by EPA 680 Method.
2. Average local weather conditions during the sampling period were 22.8°C and 29.99 in Hg
3. Established US EPA exposure levels for children (6 to < 12 years old) is 300 nanograms per cubic meter (ng/m³).
4. Established US EPA exposure levels for children (12 to < 15 years old) is 500 nanograms per cubic meter (ng/m³).
5. Established US EPA exposure levels for children (15 to < 19 years old) is 600 nanograms per cubic meter (ng/m³).
6. Established US EPA exposure levels for adults (19+ years old) is 500 nanograms per cubic meter (ng/m³).

Table 5: Summary of Confirmatory Surface Wipe Results – August 30, 2017

Sample ID	Sample Location	Sample Date	Total PCBs
			µg/100 cm ²
Window Sills			
JFK-294	Admin Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0
JFK-295	Admin Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0
JFK-296	White Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0
JFK-298	White Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0
JFK-299	White Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0
JFK-300	Green Wing - 1st Floor - Window Sill	8/30/2017	< 1.0
JFK-311	Blue Wing - 2nd Floor Classroom - Window Sill	8/30/2017	< 1.0
JFK-316	Black Wing - 1st Floor	8/30/2017	< 1.0
Base of Hallway Expansion Joints			
JFK-297	White Wing - 1st Floor Hallway - Base of expansion joint	8/30/2017	< 1.0
JFK-302	Green Wing - 1st Floor - Base of Expansion Joint	8/30/2017	< 1.0
JFK-306	Blue Wing - 1st Floor Hallway - Base of expansion joint	8/30/2017	< 1.0
JFK-309	Blue Wing - 1st Floor Hallway	8/30/2017	< 1.0
JFK-310	Blue Wing - 2nd Floor Hallway	8/30/2017	< 1.0
JFK-320	Red Wing - 1st Floor Hallway - Base of expansion joint	8/30/2017	< 1.0
JFK-321	Red Wing - 2nd Floor Hallway - Base of expansion joint	8/30/2017	< 1.0
Food Handling Areas			
JFK-303	Green Wing - 1st Floor Cafeteria - Window Sill	8/30/2017	< 1.0
JFK-305	Green Wing - 1st Floor Faculty Lounge	8/30/2017	< 1.0
Points of Entry at Exterior Doors			
JFK-304	Green Wing - 1st Floor - Cafeteria Door	8/30/2017	< 1.0
JFK-312	Yellow Wing - 1st Floor - Hallway Exterior Door	8/30/2017	< 1.0
JFK-313	Yellow Wing - 1st Floor - Girls Locker Room/Pool Exterior Door	8/30/2017	< 1.0
JFK-314	Yellow Wing - 1st Floor - Girls Locker Room/Door 21	8/30/2017	< 1.0
JFK-319	Red Wing - 1st Floor - Outer Exterior Door	8/30/2017	< 1.0
JFK-324	Central Hub - 1st Floor Out Exterior Door 25	8/30/2017	< 1.0
Stairwells/Offices - Floor Surfaces			
JFK-307	Blue Wing - Level 1 Landing	8/30/2017	< 1.0
JFK-308	Blue Wing - Level 2 Landing	8/30/2017	< 1.0
JFK-315	Yellow Wing - 1st Floor PE Office	8/30/2017	< 1.0
JFK-317	Red Wing - Level 1 Landing	8/30/2017	< 1.0
JFK-318	Red Wing - Level 2 Landing	8/30/2017	< 1.0
JFK-323	Central Hub - outside H104	8/30/2017	< 1.0
JFK-325	Central Hub - outside H110	8/30/2017	< 1.0
JFK-326	Central Hub - near Black Wing	8/30/2017	< 1.0
Field QA/QC			
JFK-301	Green Wing - 1st Floor - Window Sill Duplicate	8/30/2017	< 1.0
JFK-322D	Red Wing - 2nd Floor Hallway - Base of expansion joint Duplicate	8/30/2017	< 1.0
JFK-327	Field Blank	8/30/2017	< 1.0

Bold denotes surface wipe sample reported above of 1 µg/100 cm² recommended by EPA Region 1

1. Hexane wipe samples collected in accordance with US EPA protocol.
2. Samples submitted to Phoenix Environmental Laboratory of Manchester, CT under standard chain of custody.
3. Wipe samples analyzed by EPA 8082 analysis with 3540C Soxhlet extraction.

Table 6: Comprehensive Summary of Surface Wipe Results

Sample ID	Sample Location	Sample Date	Total PCBs	Aroclor
			$\mu\text{g}/100 \text{ cm}^2$	
Window Sills				
PCB-043	White Wing - 1st Floor Classroom - Window Sill	5/24/2017	1.3	1254
PCB-044	White Wing - 1st Floor Classroom - Window Sill	5/24/2017	1.1	1254
JFK-296	White Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0	
JFK-298	White Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0	
JFK-299	White Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0	
PCB-045	Admin Wing - 1st Floor Office - Window Sill	5/24/2017	1.1	1254
PCB-046	Admin Wing - 1st Floor Classroom - Window Sill	5/24/2017	1.4	1254
JFK-294	Admin Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0	
JFK-295	Admin Wing - 1st Floor Classroom - Window Sill	8/30/2017	< 1.0	
PCB-047	Blue Wing - 2nd Floor Classroom - Window Sill	5/24/2017	1.2	1254
JFK-311	Blue Wing - 2nd Floor Classroom - Window Sill	8/30/2017	< 1.0	
PCB-072	Red Wing - 1st Floor Classroom - Window Sill	5/25/2017	< 1.0	
PCB-078	Blue Wing - 2nd Floor Classroom - Window Sill	5/25/2017	< 1.0	
PCB-079	Red Wing - 2nd Floor Classroom - Window Sill	5/25/2017	< 1.0	
JFK-300	Green Wing - 1st Floor - Window Sill	8/30/2017	< 1.0	
JFK-303	Green Wing - 1st Floor Cafeteria - Window Sill	8/30/2017	< 1.0	
JFK-305	Green Wing - 1st Floor Faculty Lounge	8/30/2017	< 1.0	
JFK-316	Black Wing - 1st Floor	8/30/2017	< 1.0	
Base of Hallway Expansion Joints				
PCB-041	Central Hub - 1st Floor Hallway - Base of expansion joint	5/24/2017	< 1.0	
PCB-042	White Wing - 1st Floor Hallway - Base of expansion joint	5/24/2017	1.1	1254
JFK-297	White Wing - 1st Floor Hallway - Base of expansion joint	8/30/2017	< 1.0	
PCB-073	Red Wing - 1st Floor Hallway - Base of expansion joint	5/25/2017	< 1.0	
JFK-320	Red Wing - 1st Floor Hallway - Base of expansion joint	8/30/2017	< 1.0	
JFK-321	Red Wing - 2nd Floor Hallway - Base of expansion joint	8/30/2017	< 1.0	
PCB-080	Black Wing - 1st Floor Hallway - Base of expansion Joint	5/25/2017	< 1.0	
PCB-083	Black Wing - 1st Floor Hallway - Base of expansion Joint	5/25/2017	< 1.0	
JFK-302	Green Wing - 1st Floor - Base of Expansion Joint	8/30/2017	< 1.0	
JFK-306	Blue Wing - 1st Floor Hallway - Base of expansion joint	8/30/2017	< 1.0	
JFK-309	Blue Wing - 1st Floor Hallway	8/30/2017	< 1.0	

Sample ID	Sample Location	Sample Date	Total PCBs	Aroclor
			µg/100 cm ²	
JFK-310	Blue Wing - 2nd Floor Hallway	8/30/2017	< 1.0	
Food Handling Areas				
PCB-068	Green Wing – 1st Floor Kitchen - Floor	5/25/2017	< 1.0	
PCB-069	Green Wing – 1st Floor Kitchen - Counter(at Window)	5/25/2017	< 1.0	
PCB-070	Green Wing – 1st Floor Kitchen - Counter (at Cashier)	5/25/2017	< 1.0	
PCB-071	Green Wing – 1st Floor Kitchen - Desk(Manager's Office)	5/25/2017	< 1.0	
PCB-074	Black Wing - 1st Floor - Food Lab Room 37 - Counter(at Window)	5/25/2017	< 1.0	
PCB-075	Black Wing - 1st Floor - Food Lab Room 37 - Floor	5/25/2017	< 1.0	
PCB-076	Black Wing - 1st Floor - Food Lab Room 37 - Counter (Station by Teacher's Desk)	5/25/2017	< 1.0	
PCB-077	Black Wing - 1st Floor - Food Lab Room 37 - Desk/Table	5/25/2017	< 1.0	
Points of Entry at Exterior Doors				
JFK-304	Green Wing - 1st Floor - Cafeteria Door	8/30/2017	< 1.0	
JFK-312	Yellow Wing - 1st Floor - Hallway Exterior Door	8/30/2017	< 1.0	
JFK-313	Yellow Wing - 1st Floor - Girls Locker Room/Pool Exterior Door	8/30/2017	< 1.0	
JFK-314	Yellow Wing - 1st Floor - Girls Locker Room / Door 21	8/30/2017	< 1.0	
JFK-319	Red Wing - 1st Floor - Outer Exterior Door	8/30/2017	< 1.0	
JFK-324	Central Hub - 1st Floor Out Exterior Door 25	8/30/2017	< 1.0	
Stairwells/Offices - Floor Surfaces				
082217GI-01	White wing - Egress - concrete area under mat	8/22/2017	< 1.0	
082217GI-02	White wing - Egress - concrete area under mat	8/22/2017	< 1.0	
082217GI-03	White wing - Egress - floor tile	8/22/2017	< 1.0	
082217GI-04	Admin Wing - Egress - floor tile	8/22/2017	< 1.0	
082217GI-05	Admin Wing - main entry- floor tile	8/22/2017	< 1.0	
082217GI-06	Red Wing - Egress - concrete area under mat	8/22/2017	< 1.0	
082217GI-07	Red Wing - Main entry - concrete area under mat	8/22/2017	< 1.0	
082217GI-08	Red Wing - Egress - floor tile	8/22/2017	1.2	1254
082217GI-09	Black Wing - Egress Room 52 - concrete	8/22/2017	< 1.0	
082217GI-10	Black Wing - Egress Room 36 - floor tile	8/22/2017	< 1.0	
082217GI-11	Black Wing - Egress Room 37 - floor tile	8/22/2017	< 1.0	
082217GI-12	Black Wing - Sewing Lab Egress - floor tile	8/22/2017	< 1.0	
082217GI-13	Black Wing - Egress Room 33 - concrete	8/22/2017	< 1.0	
082217GI-14	Black Wing - Main entry - concrete area under mat	8/22/2017	< 1.0	
082217GI-15	Black Wing - Art Room Egress - floor tile	8/22/2017	< 1.0	
082217GI-16	Center Hub door 13- egress - floor tile	8/22/2017	< 1.0	
082217GI-17	Yellow wing- egress - concrete under mat	8/22/2017	< 1.0	
082217GI-18	Yellow wing - gym- egress- hardwood floor	8/22/2017	< 1.0	

Sample ID	Sample Location	Sample Date	Total PCBs	Aroclor
			$\mu\text{g}/100 \text{ cm}^2$	
082217GI-19 JFK-140A	Yellow wing - gym- egress- hardwood floor (JFK-140A collected from metal door threshold)	8/22/2017	< 1.0	
082217GI-20	Yellow wing, gym- egress - hardwood floor	8/22/2017	< 1.0	
082217GI-21	Yellow wing, gym- main entry - concrete area under mat	8/22/2017	< 1.0	
082217GI-22	Yellow wing- boys locker room - egress - 1'x 1' ceramic tile	8/22/2017	< 1.0	
082217GI-23	Yellow wing- girls locker room - egress - 1'x 1' ceramic tile	8/22/2017	1.1	
082217GI-24	Blue wing - egress - concrete area under mat	8/22/2017	4.2	
082217GI-25	Blue wing -main entry - concrete under mat	8/22/2017	< 1.0	
082217GI-26	Blue wing - egress - floor tile	8/22/2017	< 1.0	
082217GI-27	Center Hub door 25- egress - Floor tile	8/22/2017	9.7	
082217GI-28	Green wing storage- egress - concrete	8/22/2017	1.1	
082217GI-29	Green wing, custodial office -egress - concrete	8/22/2017	< 1.0	
082217GI-30	Green wing, boiler room, egress - concrete	8/22/2017	< 1.0	
082217GI-31	Green wing, cafeteria - egress - ceramic floor tile	8/22/2017	< 1.0	
082217GI-32	Green wing, cafeteria - egress - floor tile	8/22/2017	< 1.0	
082217GI-33	Green wing - main entry - concrete under area mat	8/22/2017	< 1.0	
082217GI-33Dup	Green wing - main entry - concrete under area mat	8/22/2017	< 1.0	
082217GI-34	Blank	8/22/2017	< 1.0	
082217GI-35	Blank	8/22/2017	< 1.0	
JFK-307	Blue Wing - Level 1 Landing	8/30/2017	< 1.0	
JFK-308	Blue Wing - Level 2 Landing	8/30/2017	< 1.0	
JFK-315	Yellow Wing - 1st Floor PE Office	8/30/2017	< 1.0	
JFK-317	Red Wing - Level 1 Landing	8/30/2017	< 1.0	
JFK-318	Red Wing - Level 2 Landing	8/30/2017	< 1.0	
JFK-323	Central Hub - outside H104	8/30/2017	< 1.0	
JFK-325	Central Hub - outside H110	8/30/2017	< 1.0	
JFK-326	Central Hub - near Black Wing	8/30/2017	< 1.0	
Field QA/QC				
PCB-081	Field Blank	5/25/2017	< 1.0	
PCB-082D	Red Wing - 2nd Floor Classroom - Window Sill Duplicate	5/25/2017	< 1.0	
JFK-301	Green Wing - 1st Floor - Window Sill Duplicate	8/30/2017	< 1.0	
JFK-322D	Red Wing - 2nd Floor Hallway - Base of expansion joint Duplicate	8/30/2017	< 1.0	
JFK-327	Field Blank	8/30/2017	< 1.0	

Bold denotes surface wipe sample reported above of $1 \mu\text{g}/100 \text{ cm}^2$ recommended by EPA Region 1

1. Hexane wipe samples collected in accordance with US EPA protocol.
2. Samples submitted to Phoenix Environmental Laboratory of Manchester, CT under standard chain of custody.
3. Wipe samples analyzed by EPA 8082 analysis with 3540C Soxhlet extraction.

Table 7: Summary of Preliminary Soil Characterization Samples

Transect Location	Depth (" bgs)	Base of Building (0 feet)			3 feet from façade			Outer extent (5 feet)		
		Sample ID	Sample Date	Total PCBs (mg/Kg)	Sample ID	Sample Date	Total PCBs (mg/Kg)	Sample ID	Sample Date	Total PCBs (mg/Kg)
Administrative Wing										
Side A - 15 feet from new addition (beneath window)	0-3"	JFK-100A	8/23/2017	0.45	JFK-142A	8/24/2017	NA	JFK-144A	8/24/2017	NA
	0-3"	JFK-138 DUP		0.55						
Side A - 37 feet from new addition (beneath window)	0-3"	JFK-101A	8/23/2017	1.1	JFK-147A	8/24/2017	ND-<1	JFK-149A	8/24/2017	ND-<1
Side A - 66 feet from new addition (beneath window)	0-3"	JFK-102A	8/23/2017	0.44	JFK-152A	8/24/2017	NA	JFK-154A	8/24/2017	NA
Side A - 96 feet from new addition (beneath window)	0-3"	JFK-103A	8/23/2017	0.46	JFK-157A	8/24/2017	NA	JFK-159A	8/24/2017	NA
Side B	0-3"	JFK-135A	8/23/2017	2.5	JFK-266A	8/24/2017	ND-<1	JFK-267A	8/24/2017	NA
Side B	0-3"	JFK-136A	8/23/2017	ND	JFK-268A	8/24/2017	NA	JFK-269A	8/24/2017	NA
White Wing										
Side A - 6 feet from hub (at expansion joint)	0-3"	JFK-104A	8/23/2017	2.9	JFK-162A	8/24/2017	ND-<1	JFK-164A	8/24/2017	ND-<1
Side A - 58 feet from hub (beneath window)	0-3"	JFK-105A	8/23/2017	2.5	JFK-166A	8/24/2017	ND-<1	JFK-168A	8/24/2017	ND-<1
Side A - 121 feet from hub (beneath window)	0-3"	JFK-106A	8/23/2017	3	JFK-171A	8/24/2017	ND-<1	JFK-173A	8/24/2017	ND-<1
Side A - 170 feet from hub (beneath window)	0-3"	JFK-107A	8/23/2017	ND-<1	JFK-176A	8/24/2017	NA	JFK-178A	8/24/2017	NA
Side B - 5 feet from corner (beneath window)	0-3"	JFK-108A	8/23/2017	0.68	JFK-181A	8/24/2017	NA	JFK-183A	8/24/2017	NA
Side B - 52 feet from corner (beneath window)	0-3"	JFK-109A	8/23/2017	2.8	JFK-186A	8/24/2017	ND-<1	JFK-188A	8/24/2017	ND-<1
Side B - 100 feet from corner (beneath window)	0-3"	JFK-110A	8/23/2017	ND-<1	JFK-191A	8/24/2017	NA	JFK-193A	8/24/2017	NA
Side B - 150 feet from corner (beneath window)	0-3"	JFK-111A	8/23/2017	ND-<1	JFK-196A	8/24/2017	NA	JFK-198A	8/24/2017	NA
Green Wing										
Side A - 10 feet from hub (beneath window)	0-3"	JFK-112A	8/23/2017	2.1	No sample- immediately adjacent to White Wing					
Side A - 70 feet from hub (beneath window)	0-3"	JFK-113A	8/23/2017	0.52	JFK-202A	8/24/2017	NA	JFK-204A	8/24/2017	NA



Transect Location	Depth (" bgs)	Base of Building (0 feet)				3 feet from façade				Outer extent (5 feet)		
		Sample ID	Sample Date	Total PCBs (mg/Kg)	Sample ID	Sample Date	Total PCBs (mg/Kg)	Sample ID	Sample Date	Total PCBs (mg/Kg)		
Side A - 102 feet from hub (beneath window)	0-3"	JFK-114A	8/23/2017	ND-<1	JFK-207A	8/24/2017	NA	JFK-209A	8/24/2017	NA	NA	
Side A - 132 feet from hub (beneath window)	0-3"	JFK-115A	8/23/2017	ND-<1	JFK-212A	8/24/2017	NA	JFK-214A	8/24/2017	NA	NA	
Side B - 10 feet from corner (beneath window)	0-3"	JFK-116A	8/23/2017	1.1	JFK-217A	8/24/2017	ND-<1	JFK-219A	8/24/2017	ND-<1	ND-<1	
Side C - 55 feet from corner (beneath window)	0-3"	JFK-117A	8/23/2017	1.7	JFK-222A	8/24/2017	ND-<1	NOT ACCESSIBLE-TRAILER				
Side C - 70 feet from corner (beneath window)	0-3"	JFK-118A	8/23/2017	0.75	JFK-225A	8/24/2017	NA	JFK-227A	8/24/2017	NA	NA	
Blue Wing												
Side A - 50 feet from corner (beneath window)	0-3"	JFK-119A	8/23/2017	1.5	JFK-230A	8/24/2017	ND-<1	JFK-232A	8/24/2017	ND-<1	ND-<1	
Side A - at outer corner (beneath window)	0-3"	JFK-120A	8/23/2017	ND-<1	JFK-235A	8/24/2017	NA	JFK-237A	8/24/2017	NA	NA	
Side B - 61 feet from corner (beneath window)	0-3"	JFK-121A	8/23/2017	0.44	JFK-239A	8/24/2017	NA	JFK-240A	8/24/2017	NA	NA	
Side B - 150 feet from corner (beneath window)	0-3"	JFK-122A	8/23/2017	0.49	JFK-241A	8/24/2017	NA	JFK-242A	8/24/2017	NA	NA	
Yellow Wing												
Side A - 25 feet from corner (at expansion joint)	0-3"	JFK-123A	8/23/2017	ND-<1	JFK-243A	8/24/2017	NA	JFK-244A	8/24/2017	NA	NA	
Side A - 124 feet from corner (at expansion joint)	0-3"	JFK-124A	8/23/2017	3.5	JFK-245A	8/24/2017	ND-<1	JFK-246A	8/24/2017	ND-<1	ND-<1	
Side B - 25 feet from corner (at expansion joint)	0-3"	JFK-125A	8/23/2017	ND-<1	JFK-247A	8/24/2017	NA	JFK-248A	8/24/2017	NA	NA	
Side C - 46 feet from corner (beneath window)	0-3"	JFK-126A	8/23/2017	0.82	JFK-249A	8/24/2017	NA	JFK-250A	8/24/2017	NA	NA	
Black Wing												
Side A - 21 feet from corner (beneath window)	0-3"	JFK-127A	8/23/2017	2.8	JFK-251A	8/24/2017	ND-<1	JFK-252A	8/24/2017	ND-<1	ND-<1	
Side A - 135 feet from corner (beneath window)	0-3"	JFK-128A	8/23/2017	ND-<1	JFK-253A	8/24/2017	NA			NA	NA	

Transect Location	Depth (" bgs)	Base of Building (0 feet)			3 feet from façade			Outer extent (5 feet)		
		Sample ID	Sample Date	Total PCBs (mg/Kg)	Sample ID	Sample Date	Total PCBs (mg/Kg)	Sample ID	Sample Date	Total PCBs (mg/Kg)
Side B - 39 feet from corner (beneath window)	0-3"	JFK-129A	8/23/2017	ND-<1	JFK-254A	8/24/2017	NA	JFK-255A	8/24/2017	NA
Side B - 201 feet from corner (at expansion joint)	0-3"	JFK-130A	8/23/2017	5.7	JFK-256A	8/24/2017	ND-<1	JFK-257A	8/24/2017	ND-<1
Red Wing										
Side A - 49 feet from hub (beneath window)	0-3"	JFK-131A	8/23/2017	1.3	JFK-258A	8/24/2017	ND-<1	JFK-259A	8/24/2017	ND-<1
Side A - within fenced area (beneath window)	0-3"	JFK-132A	8/23/2017	ND-<1	JFK-260A	8/24/2017	NA	JFK-261A	8/24/2017	NA
Side B - 35 feet from corner (beneath window)	0	JFK-133A	8/23/2017	0.63	JFK-262A	8/24/2017	NA	JFK-263A	8/24/2017	NA
Side B - 150 feet from corner (beneath window)	0-3"	JFK-134A	8/23/2017	ND-<1	JFK-264A	8/24/2017	NA	JFK-265A	8/24/2017	NA

Notes

1. Bold denotes analytical result reported above laboratory reporting limit (RL)
2. Gray Shading denoted analytical result above 1 ppm threshold
3. NS denotes "no sample"
4. NA denotes "not analyzed"
5. Preliminary soil samples were collected and transported to Phoenix Environmental Laboratory of Manchester, CT under the standard chain of custody for EPA 8082 PCB analysis with 3540C Soxhlet extraction.

Appendix D

PCB Management Program Revision History



Appendix E

Renovation/Remediation Activity Standard Operating Procedures

(Applies only to Abatement Contractors after Approval for
Removal by EPA and CTDEEP)



REMEDATION ACTIVITY STANDARD OPERATING PROCEDURES

This standard operating procedure (SOP) provides precautionary measures and best work practices that will be followed when conducting a renovation where PCB-containing caulk could be encountered or where assumed PCB materials are present. The work practices will employ measures during renovation/remediation; leave the work area clean and safe for building occupants to provide direct personal protection of workers and building occupants, as well as to prevent spreading PCB dust to other surrounding areas. All renovation, remediation, repair work shall be conducted by an experienced PCB abatement contractor with a minimum of three years' experience with similar work.

COMMUNICATION WITH SCHOOL OCCUPANTS

Clear communication with all stakeholders (e.g., building occupants, workers, teachers and community members) will be conducted to create a safe working environment. Affected groups will be informed of: the goals, type, and length of the renovation/remediation activities; health and safety aspects of the project; and site access requirements and limitations.

Site security measures will be used to prevent access of unauthorized persons to the work areas until after such final clean-up. Security measures will include: signs, locked doors, barrier tape and/or cones to keep all non-workers, especially children, out of the work area(s).

STANDARD OPERATING PROCEDURES

- A. The Contractor shall employ a competent Supervisor with at least three years of experience on projects of similar scope and magnitude, who shall be responsible for all work involving > 50 ppm PCB abatement, as described in this Specification, and defined in applicable regulations, and have full-time daily supervision of the same. The Supervisor shall be the competent person as defined by OSHA regulations.
- B. The Contractor shall furnish all labor, materials, facilities, equipment, installation services, employee training, permits, licenses, certifications, agreements, and incidentals necessary to perform the specified work. Work shall be performed in accordance with the Contract Documents, the latest regulations from OSHA, the United State Environmental Protection Agency (EPA), and all other applicable federal, state, and local agencies. Whenever the requirements of the above references conflict or overlap, the more stringent provision shall apply.
- C. All project personnel engaged in the work covered under this section shall be trained in accordance with OSHA Title 29 CFR, Parts 1910.1000 and 1910.1200.
- D. This Section also specifies the procedures for removal of containment, PPE, cleaning materials and supplies, and waste generated during removal of PCB Bulk Product Waste and disposal of containment, PPE, cleaning materials and supplies, and waste generated during removal of PCB Bulk Product Waste as PCB Remediation Waste.

- E. Subsequent cleaning of all adjacent surfaces upon completion of Work is also included in this Section.
- F. Disturbance or removal of PCB-containing material may cause a health hazard to workers and building occupants. The Contractor shall disclose to workers, supervisory personnel, sub-contractors, and consultants who will be at the Site of the seriousness of the hazard and proper work procedures that must be followed.
- G. During performance of the Work, workers, supervisory personnel, Subcontractors, or consultants who may encounter, disturb, or otherwise function in the immediate vicinity of the PCB-containing material, shall take continuous measures as necessary to protect workers from the hazard of exposure. Such measures shall include the procedures and methods described in this Section, OSHA regulations, EPA regulations, and local requirements, as applicable.
- H. If requested or required by local, state, federal, and any other authorities having jurisdiction over such work, the Contractor shall allow the Work of this Contract to be inspected. The Contractor shall immediately notify the Owner and the Consultant, and shall maintain written evidence of such inspection for review by the Owner and the Consultant.

REGULATIONS AND STANDARDS

- A. The Contractor shall be solely responsible for conducting this project and supervising all work in a manner that will be in conformance with all federal, state, and local regulations and guidelines pertaining to PCB abatement. Specifically, the Contractor shall comply with the requirements of the following:
 - 1. EPA TSCA (Title 40 CFR, Part 761);
 - 2. OSHA Hazardous Waste Operations and Emergency Response Regulations (Title 29 CFR, Parts 1910.120);
 - 3. OSHA Respiratory Protection Standard (Title 29 CFR, Part 1910.134)
 - 4. OSHA Hazard Communication (Title 29 CFR, Part 1910.1200)
 - 5. Department of Transportation (DOT) Hazardous Waste Transportation Regulations (Title 49 CFR, Parts 170 – 180).
 - 6. CTDEEP Regulations;
 - 7. 2003 International Building Code as adopted by the 2005 State of Connecticut Building Code including the 2009, 2011, and 2013 amendments;
 - 8. Life Safety Code (National Fire Protection Association [NFPA]);
 - 9. Local health and safety codes, ordinances or regulations pertaining to PCB remediation and all national codes and standards including ASTM, ANSI, and Underwriter's Laboratories.

POSTING AND RECORD MAINTENANCE REQUIREMENTS

- A. The following items shall be conspicuously displayed proximate but outside of removal work areas.
 - 1. Exit Routes: Emergency exit procedures and routes

2. Emergency Phone Numbers: A list indicating the telephone numbers and locations of the local hospital(s); the local emergency squad; the local fire department, the local police department, the Poison Control Center, Chemical Emergency Advice (CHEMTREC), the local Department of Health's local office, the Remediation Contractor (on-site and after hours numbers), and the environmental consultant (on-site and after hours contact numbers).
3. Warning Signs: Warning signs shall be in English and the language of any workers on-site who do not speak English, and be of sufficient size to be clearly legible and display the following or similar language in accordance with OSHA Title 29 CFR, Part 1910.1200:

WARNING
HAZARDOUS WASTE WORK AREA
PCBs-POISON
NO SMOKING, EATING OR DRINKING
AUTHORIZED PERSONNEL ONLY
PROTECTIVE CLOTHING IS REQUIRED IN THIS AREA

In addition, all entrances to work areas shall be posted with a PCB M_L large marker.

- B. The Contractor shall maintain the following items on-site and available for review by all employees and authorized visitors:
 1. Contractor's Site-Specific HASP.
 2. Documentation of Training, Medical Clearance, and Fit Test Records for all employees and the project Supervisor.
 3. Codes, Standards, and Publications.
 4. SDS for all chemicals used during the project.
 5. Copies of Contractor's written hazard communication, respiratory protection, and confined space entry programs.
- C. The Contractor is responsible and liable for the health and safety of all on-site personnel and the off-site community affected by the Work. All on-site workers or other persons entering the abatement work areas, decontamination areas, or waste handling and staging areas shall be knowledgeable of and comply with the requirements of the site-specific HASP at all times. The Contractor's HASP shall comply with all applicable federal, state, and local regulations protecting human health and the environment from the hazards posed by the Work.
- D. Consistent disregard for the provisions of the HASP shall be deemed as sufficient cause for immediate stoppage of work and termination of the Contract or any Sub-contracts without compromise or prejudice to the rights of the Owner or Consultant.
- E. Any discrepancies between the Contractor's HASP and these Specifications or federal, state, and local regulations shall be resolved in favor of the more stringent requirements that provide the highest degree of protection to the project personnel, the surrounding community, and the environment.
- F. In addition to exposure concerns relating to the presence of PCBs, other health and safety considerations will apply to the Work. The Contractor shall be responsible for recognizing such

hazards and shall be responsible for the health and safety of the Contractor's employees at all times. It is the Contractor's responsibility to comply with all applicable health and safety regulations.

- G. The HASP shall be reviewed by all personnel prior to entry into the abatement, decontamination, or waste staging areas. Includes representatives of the Contractor, Owner, Consultant, Subcontractor(s), Waste Transporter or Federal, State, or Local Regulatory Agencies. Such review shall be acknowledged and documented by the Contractor Site Supervisor by obtaining the name, signature, and affiliation of all personnel reviewing the HASP.
- H. The HASP shall be maintained so as to be readily accessible and reviewable by all site personnel throughout the duration of the abatement project, and until all waste materials are removed from the Site, and disposed at the appropriate disposal facility.
- I. The Contractor Site Supervisor shall be responsible for ensuring that project personnel and site visitors are informed of and comply with the provisions of the HASP.
- J. The Contractor shall lay-out and clearly identify work areas in the field. Access by equipment, site personnel, and the public to the work areas shall be limited as follows:
 - 1. Abatement Zone: The Abatement Zone(s) shall consist of all areas where removal of PCB-Containing Materials and other Toxic or Hazardous Substances, and waste handling and staging activities are on-going and the immediately surrounding locale or other areas where contamination could occur. Each Abatement Zone for purposes of removal of PCB-Containing Materials or other Toxic or Hazardous Substances for disposal shall be performed within a regulated work area. (to demarcate work areas from non-work areas. The regulated work area shall be visibly delineated with appropriate warning signs at all approaches to the area (including a large PCB M_L marker), and be restricted from access by all personnel except those directly necessary for the completion of the respective abatement tasks. The Abatement Zones shall be relocated and delineated as necessary as work progresses from one portion of the Site to another, to limit access to each area and to minimize risk of exposure to Site workers and the general public. Access shall be controlled at the periphery of the Abatement Zones to regulate the flow of personnel and equipment into and out of each zone and to help verify that proper procedures for entering and exiting are followed. All persons within the Abatement Zones shall wear the appropriate level of protection established in the Contractor's HASP.
 - 2. Decontamination Zone: The Decontamination Zone is the transition zone between the Abatement Zone and the clean support zone of the project site, and is intended to reduce the potential for contaminants from being dispersed from the Abatement Zone to clean areas of the Site. The Decontamination Zone shall consist of a buffer area surrounding each Abatement Zone through which the transfer of equipment, materials, personnel and containerized waste products will occur, and in which decontamination of equipment, personnel, and clothing will occur. The Decontamination Zones shall be constructed as a three chamber decontamination unit for workers and a two chamber equipment room for waste load out as detailed in Section 3.03 of this Specification. All emergency response and

first aid equipment shall be readily maintained in this zone. All PPE and clothing shall be removed or decontaminated in the Decontamination Zone prior to exiting to the Support Zone.

3. Support Zone: The Support Zone shall consist of the area outside the Decontamination Zones and the remainder of the project site. Administrative and other support functions and any activities that by nature need not be conducted in the Abatement or Decontamination Zone related to the project shall occur in the Support Zone. Access to the Abatement and Decontamination Zones shall be controlled by the Contractor Site Supervisor, and limited to those persons necessary to complete the abatement work, and who have reviewed and signed the HASP.

PCB BULK PRODUCT WASTE REMOVAL PROCEDURES

- A. The Contractor shall have a designated "competent person" on the Site at all times to ensure proper work practices throughout the project.
- B. The Contractor shall regulate the work area as required for compliance with OSHA Title 29 CFR, Part 1910.1200 to prohibit non-trained workers from entering areas where PCBs are to be removed.
- C. The Contractor shall establish worker decontamination unit remote from the work area.
- D. Materials shall be removed in a manner which does not breakdown the materials into fine dust or powder to the extent feasible. Equipment and tools to be utilized shall include hand tools and mechanical equipment such as demolition hammers, mechanical grinders, etc. to remove materials from adjacent substrates. Mechanical removal equipment shall as appropriate be fitted with HEPA-filtered vacuum attachments.
- E. The use of minimal quantities of water to moisten the generated dust prior to collection shall be utilized. Under no circumstances shall the PCB waste show evidence of free liquid water, pooling, or ponding within the waste stream. Any liquid used to wet the dust and debris to control fugitive emissions shall be properly containerized and decontaminated in accordance with EPA Title 40 CFR, Part 761.79(b)(1) or disposed in accordance with EPA Title 40 CFR, Part 761.60(a).
- F. Dry or brittle PCB-Containing Material shall be removed with additional engineering controls such as use of a HEPA-filtered vacuum to remove accumulated dust or debris during removal.
- G. Sequence of removal shall follow the following general requirements:
 1. Site preparation and controls shall be completed. Work shall not proceed until authorized by the Consultant.
 2. PCB Bulk Product Waste shall be removed in entirety for disposal as PCB Bulk Product Waste. Note these materials contain > 1% asbestos.
 3. Following removal, cleaning of work area shall be performed followed by a final visual inspection and verification sampling (if applicable) by the Consultant.

4. Following an acceptable final visual inspection and verification sampling, the containment barriers, PPE, clean materials and supplies, and waste generated during removal of PCB Bulk Product Waste shall be containerized for disposal as PCB Remediation Waste.
- H. Remove and containerize all visible accumulations of PCB Bulk Product Waste and PCB Remediation Waste. Waste shall be containerized in labeled and signed 6-mil poly disposable bags. Tie wraps for bags shall be plastic, 5-inches long (minimum), pointed and looped to secure filled plastic bags. Disposal bags shall then be placed in steel 55-gallon DOT-approved drums.
 - I. At any time during PCB abatement should the Consultant suspect contamination of areas outside the work area; the Consultant shall issue a stop work order until the Contractor takes required steps to decontaminate these areas, and to eliminate the causes of such contamination. Unprotected individuals shall be prohibited from entering suspected contaminated areas until air sampling and visual inspections indicate acceptable decontamination.
 - J. The Consultant shall conduct a final visual inspection of the work area. If residual suspect PCB-containing debris is identified during the final inspection, the Contractor shall comply with the Consultant's request to render the area clean of all residual PCB.

Appendix F

Periodic Surveillance Forms





PCBs < 50 PPM Periodic Surveillance Form

Facility Address: John F. Kennedy Middle School

Date of Surveillance: _____

PCB-Containing Material <50 PPM	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Quantity Damaged	Comments/Action(s) Taken
1/4" - 1", white, hard, heavily weathered	Metal window/louver frame to glass pane/metal frame (All window/louver configurations throughout original building)	Damaged			~3,747 LF	O&M Plan requires periodic inspections to check for loose caulking that has fallen to ground and addressed by Abatement Contractor
1/2", light grey/brown, soft, flexible	Metal door frame to exterior brick façade (Type 1 and 2 Exterior Doors)	Fair				
1/2", white, brittle	Metal door frame to exterior brick façade (Type 3 Exterior Doors)	Fair				
3/8", light tan, hard, (painted)	Metal door frame to exterior brick façade (Type 4 Exterior Doors)	Fair				
1/2", white, soft, flexible	Interior Caulking at Backsplashes, Sinks and Countertops	Fair				
1/2", black, flexible, soft, sticky	Interior Glazing between Metal Frame and Masonry Wall	Fair				

PCB-Containing Material <50 PPM	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Quantity Damaged	Comments/Action(s) Taken
1/2", off-white/ light grey, hard, brittle	Interior Caulking at Exterior Windows	Damaged				O&M Plan requires periodic inspections to check for loose caulking/glazing that will be picked up and cleaned up custodial staff

Conditions: SD = Significant Damage; D = Damaged; F = Fair; G = Good; IA = Inaccessible; NA = Not Applicable

Surveillance Conducted by: _____
(Print Name) _____
(Signature)

Surveillance Reviewed by: _____
(Print Name) _____
(Signature)

"Damaged" means friable or non-friable miscellaneous caulking and glazing compound(s) which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is diminished or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is diminished or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of PCBs from the substrate; flaking, blistering, or crumbling of the PCBs from the substrate; significant or repeated gouges, marks, PCBs debris originating from the PCBs in question, or other signs of physical injury on the PCBs;



PCBs ≥ 50 PPM Periodic Surveillance Form

Facility Address: John F. Kennedy Middle School

Date of Surveillance: _____

PCB-Containing Material ≥50 PPM	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Quantity Damaged	Comments
1/4", light grey/off-white, hard, brittle	Metal window frame to exterior brick façade and steel lintel (All window configurations throughout original building)	Fair				
1/2" light grey/brown, soft, flexible	Metal window frame to exterior brick façade and steel lintel (Repair Caulking at Type 6 windows)	Fair				
1/2", white, oxidized, medium hard	Pre-cast concrete sill to exterior brick façade (All window configurations throughout original building)	Damaged			~50 LF	O&M Plan requires periodic inspections to check for loose caulking that has fallen to ground and addressed by Abatement Contractor
1/2", light grey/brown, soft, flexible	Pre-cast concrete sill to exterior brick façade (Repair Caulking at Type 3 windows)	Damaged			~12 LF	O&M Plan requires periodic inspections to check for loose caulking that has fallen to ground and addressed by Abatement Contractor
1/2", light grey/off-white soft, flexible	Exterior Expansion Joints within Brick Facade	Fair				
White/light grey, hard heavily weathered	Exterior Expansion Joints within Brick Facade	Fair				



PCB-Containing Material \geq 50 PPM	Location	Previous Condition	Present Condition	Change in Condition (Yes/No)	Quantity Damaged	Comments
1/2", light grey, soft, flexible (foam backing within joint)	Vertical control Joints throughout Hallways and gymnasium Masonry Walls to Concrete Column	Good				Currently Encapsulated with Sika-62, and Hard Air-Tight Barrier(s)

Conditions: SD = Significant Damage; D = Damaged; F = Fair; G = Good; IA = Inaccessible; NA = Not Applicable

Surveillance Conducted by: _____
(Print Name) (Signature)

Surveillance Reviewed by: _____
(Print Name) (Signature)

"Damaged" means friable or non-friable miscellaneous caulking and glazing compound(s) which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is diminished or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is diminished or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of PCBs from the substrate; flaking, blistering, or crumbling of the PCBs from the substrate; significant or repeated gouges, marks, PCBs debris originating from the PCBs in question, or other signs of physical injury on the PCBs;

Appendix G

Record of PCB Awareness Training





FUSS & O'NEILL
EnviroScience, LLC

October 2, 2017

Mr. Bryan R. H. Chodkowski
Town Manager
Town of Enfield
820 Enfield Street
Enfield, CT 06082

**RE: Polychlorinated Biphenyls (PCB) Awareness Training
John F. Kennedy Middle School, Enfield, CT**
Fuss & O' Neill EnviroScience Project No. 20170088.A5E

Dear Mr. Chodkowski:

On September 27, 2017, Mr. Bruce Gregoire and Mr. Carlos Texidor conducted Polychlorinated Biphenyls (PCB) Awareness Training for the faculty and staff of John F. Kennedy Middle School and the Town of Enfield Department of Public Works. This training meets the requirements of the Operations & Maintenance Plan for Polychlorinated Biphenyls for John F. Kennedy Middle School located in Enfield, Connecticut, dated September 20, 2017. A copy of the attendance sheets is attached.

Records of the Polychlorinated Biphenyls (PCB) Awareness Training for Faculty and Staff should be included in the Polychlorinated Biphenyls (PCBs) Operations & Maintenance Plan for John F. Kennedy Middle School.

Please do not hesitate to contact me should you have any questions or comments. Fuss & O'Neill EnviroScience is pleased to have been of service to John F. Kennedy Middle School.

Sincerely,

Carlos Texidor
Senior Project Manager

CT/kr

Enclosure

146 Hartford Road
Manchester, CT
06040
t 860.646.2469
800.286.2469
f 860.533.5143

www.fando.com

Connecticut
Massachusetts
Rhode Island
South Carolina



DATE: September 27, 2017

Presenters: Bruce Gregoire and Carlos Texidor

John F Kennedy Middle School

PCB Awareness Training

Training Location: 155 Raffia Road, Enfield, Connecticut

PRINT YOUR NAME	SIGNATURE	FACILITY/ DEPARTMENT
CHRIS BOGWINSKY		B+G
Chris Hulevitch		B+G
BUTCH LUMBERT		B+G
Scott Beiler		B+O
John DeGRAY		B+G
Rich Presutti		custodial
Bill Maynard		B+G
Jamie Nickerson		B+G
John Lowe		B+G
Bruce Meyers		B+G
Adam Meyers		B+G
MIKE PARKMAN		B+G
Steve PARADIS		custodial
Socrates Bravo		custodial
WALLACE TROXLER		custodial



DATE: September 26, 2017

Presenters: Bruce Gregoire and Carlos Texidor

John F Kennedy Middle School

PCB Awareness Training

Training Location: 155 Raffia Road, Enfield, Connecticut

PRINT YOUR NAME	SIGNATURE	FACILITY/ DEPARTMENT
Andy Venn		Cashier
Jason Sackman		B+G
Robert Lally		B+G
Glenn O'Neil		B+G
Rick DeRog		Custodial
FRAN Provender		Teacher
David Abraham		B+G
Mark GAR		Facilities
Ryan LaRoc		B+G
Turner - Tracy		B+G
JONATHAN BILMES		DPW.
Ben Cutler		B+G
William T. Higgins		CS
JAMES SAW		

Sign In

Socrates Bravo

Steven PARADIS

Andy Rhodes

Zachary Nolan

Iwa Snow

Rick Presutti

Wally Higgins



Session Initial In

Course Title 6-8 JFK TEACHERS
Location JOHN F. KENNEDY MIDDLE SCHOOL
Status Active
Instructor(s) Steve Sargalski

Session # 783384
Number of Seats 150

Total Registered: 98	Occurrences / Schedules	
Registrants	09/27/2017	
Lisa Alpert		✓
Renee Baillargeon		✓
Michael Baldwin		✓
Gregg Balicki		✓
Elana Beebe		✓
Adam Behling		✓
Judy Behling		✓
Damaris Berkey		✓
Kara Bordieri		✓
Jason Bouchard		✓
Lisa Burt		✓
Jennifer Carra		✓
Julie Carrigan		✓

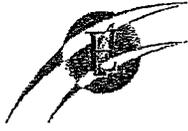
or Bob Cressotti



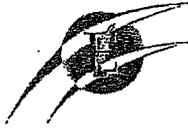
LeeAnn Cerpovicz		✓
Janice Cerrato		✓
Sarah Chadbourne		AB - Called out
Sarah Cianci		✓
Rebecca Clarity		✓
Sherri-Lee Collen		✓
Judith Connick		AB
Marilynn Cressotti		✓
Dennis Curtin- McKenna		✓
Donna DeJordy		✓
William Delaney		✓
Mary Desrosier		✓
Pam Estes		✓
Robert Evans		AB Today
Leah Ewing		✓
Toni Farrell- Gugliot		✓
Kathryn Fawthrop		✓
Kristen Fitzsimons		✓



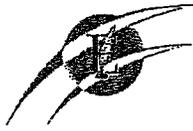
Steven Fix		✓
Karen Garvey		✓
Jennifer Gaudette		✓
John Giacchi		✓
Dayna Gilbert		✓
Randi Gina		✓
Sharon Gorman		✓
Rachel Grigely		✓
David Guertin		✓
Kaitlyn Harrison		✓
Danielle Hill		✓
Mark Hines		✓
Sarah Horan		✓
Carrie Humber		✓
David Iacobucci		✓
Shannon Kudryk		✓
Alexa Kulinski		✓
Melaine Kulpeska		✓



Kristen Langevin		✓
Tracy Lavelle		✓
LeeAnn Littlejohn		✓
Gail Maloney		absent
Sarah Mayo		✓
Rachel McCann		absent
Maureen McGreevy		✓
Lynn Mgrdichian		absent
Teresa Michaud		✓
Patricia Millar		✓
Michael Misseri		✓
Adam Mitchell		✓
Kristie Mitchell		✓
Heather Munafo		✓
Christine Munroe		✓
Kimberly Nadeau		✓
Colleen Nelson		✓
Michael Nelson		✓



Shea Novak	✓	
Carmen Nuccio	✓	
Pamela Page	✓	
Amber Pascoe	✓	
Amy Platt	✓	
John Power	✓	
Fred Provencher	✓	
Michelle Provencher	✓	
Carri Reitz	✓	
Adam Rinaldi	✓	
Stuart Sanborn	✓	
Amy Santanella	✓	
Steve Sargalski	✓	
Rebecca Scavatto	✓	
Leigh Scordato	✓	
Rebecca Sikorowicz	✓	
James Soar	✓	
Hannah Song	✓	



Amy Szydowski	<i>approved to leave Per VP</i>	
Heather Teraila	✓	
Caroline Thibadeau	✓	
Michael Tiroletto	✓	
Alex Tracy	✓	
John Unghire	✓	
Heather Wasileski	✓	
Robert Whinnem	✓	
Jennifer Willis	✓	
Katie Worden	✓	
Nicole Wright	✓	
Jennifer Young	✓	
Brian Zawodniak	✓	

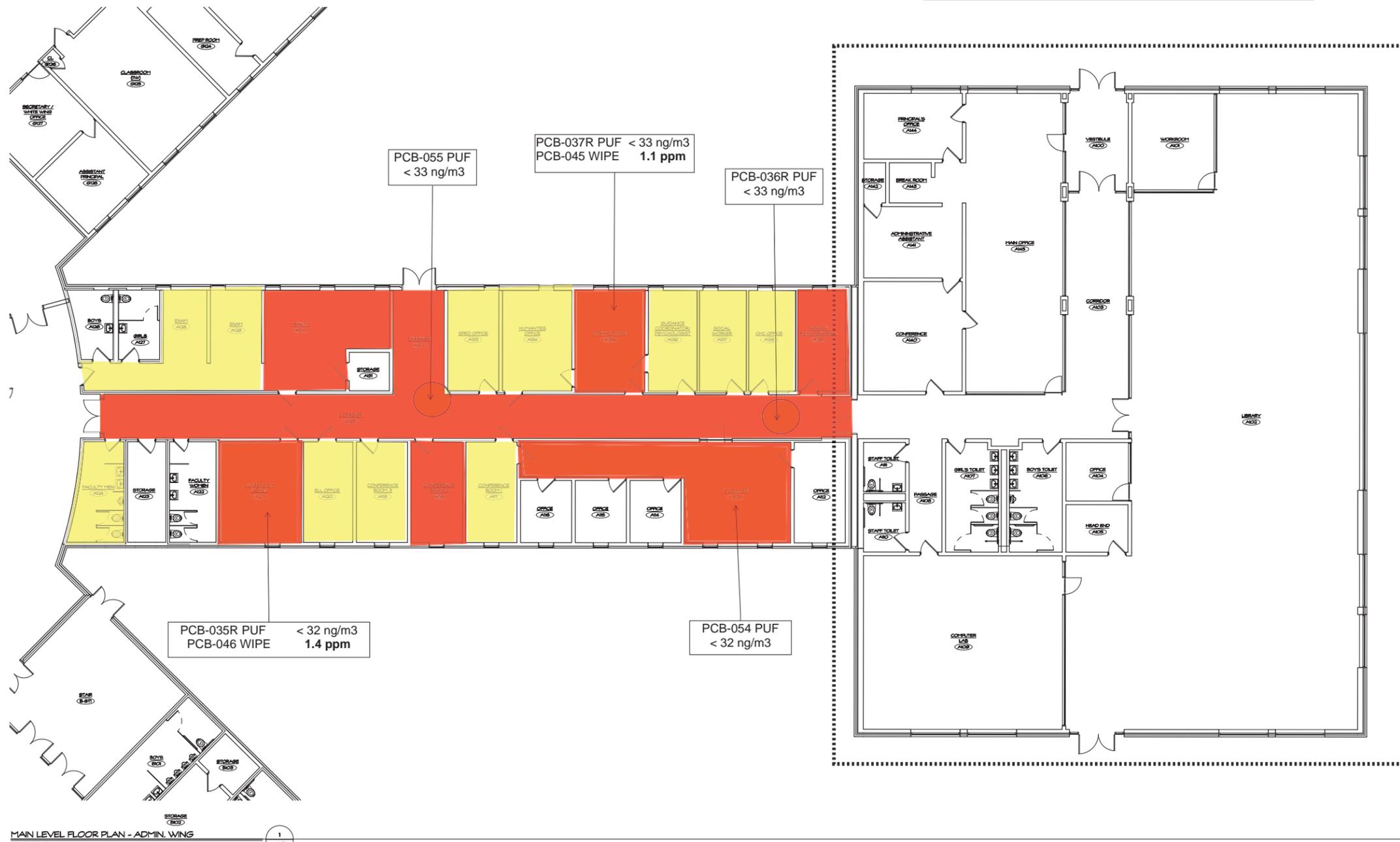


Appendix H

Areas of the School that will be Sampled for the Year(s)



ADMINISTRATIVE WING ADDITION
Construction Date: October 2001



MAIN LEVEL FLOOR PLAN - ADMIN. WING
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND

- NEW METAL STUD PARTITIONS
- NEW MASONRY WALL (4" BRICK VENEER)
- NEW CPU WALL
- DOOR NUMBER
- WINDOW TYPE
- ROOM NAME
- ROOM NUMBER
- PARTITION TYPE
- CONSTRUCTION NOTE
- ELEVATION/SECTION NUMBER
- SHEET NUMBER
- WALL SECTION NUMBER
- SHEET NUMBER
- INTERIOR ELEVATION NUMBER
- SHEET NUMBER
- FIRE EXTINGUISHER CABINET (RECESSED ALL LOCATIONS)
- H.D.F. - HANDICAPPED DRINKING FOUNTAIN - SEE 3/A104
- FLOOR DRAIN - SLOPE TILE TO DRAIN
- WHITE BOARD / TACK BOARD / PEG BOARD - REFER TO DRAWING A100

- GENERAL NOTES**
1. READ ALL GENERAL NOTES ON DRAWING A101. CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS.
 2. PATCH TO MATCH ALL EXISTING WALLS AND CEILING TO REMAIN AFFECTED BY NEW WORK.
 3. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK, CONCRETE MASONRY UNITS AND METAL FRAMING UNLESS OTHERWISE NOTED.
 4. ALL NEW WALL AND PARTITION ASSEMBLIES SHALL EXTEND TO UNDERSIDE OF DECK UNLESS OTHERWISE NOTED.
 5. PROVIDE CPU WITH PRE-MANUFACTURED BULLNOSE AT ALL EXPOSED CORNERS. WHERE THE WORD "ALIGN" IS INDICATED IT SHALL MEAN TO ALIGN BOTH SIDES OF WALL.

CONSTRUCTION NOTES - PLAN

No.	NOTE

GLAZING SCHEDULE

No.	NOTE

CONSTRUCTION NOTES - RCP

TOILET ACCESSORIES

No.	NOTE
1	1'-6" X 3" MIRROR (CENTER ON LAV)
2	4" X 3" 16" MIRROR (CENTER ON LAV)
3	42" HORIZ. GRAB BAR
4	36" HORIZ. GRAB BAR
5	24" HORIZ. GRAB BAR
6	18" VERT. GRAB BAR
7	30" SWING AWAY GRAB BAR
8	WALL MOUNTED H.C. WATER CLOSET (8" TO TOP OF SEAT)
9	WALL MOUNTED WATER CLOSET (8" TO TOP OF SEAT)
10	WALL MOUNTED H.C. URINAL (8" TO RIF)
11	WALL MOUNTED URINAL (8" TO RIF)
12	FLOOR MOUNTED CHILD WATER CLOSET
13	SURFACE MTD. H.C. PAPER TOWEL DISPENSER/ WASTE RECEPTACLE
14	SURFACE MTD. H.C. SOAP DISPENSER
15	SURFACE MOUNTED H.C. TOILET PAPER DISPENSER
16	TOILET PARTITIONS: SEE PROJ. MAN.
17	URINAL SCREEN: SEE PROJ. MAN.
18	ADA ONE-PIECE FIBERGLASS PRE-FABRICATED ROLL-IN SHOWER - COORDINATE MASONRY OPENING SIZE W/ SHOWER MANUFACTURER - SEE PLUMBING DRAWINGS
19	ADA ONE-PIECE FIBERGLASS TRANSFER SHOWER - COORDINATE MASONRY OPENING SIZE W/ SHOWER MANUFACTURER - SEE PLUMBING DRAWINGS
20	ADA FOLD DOWN SHOWER SEAT
21	CURTAIN HOOK AND ROD
22	LAV GUARD
23	BABY CHANGING STATION
24	ADULT CHANGING STATION
25	EXPRESS 2 STATION SINK H.C. LAV
26	WALL MOUNTED H.C. LAV (2 - 10" TO TOP)

Project Title: _____
Owner _____
Project Name _____
Enter address here _____

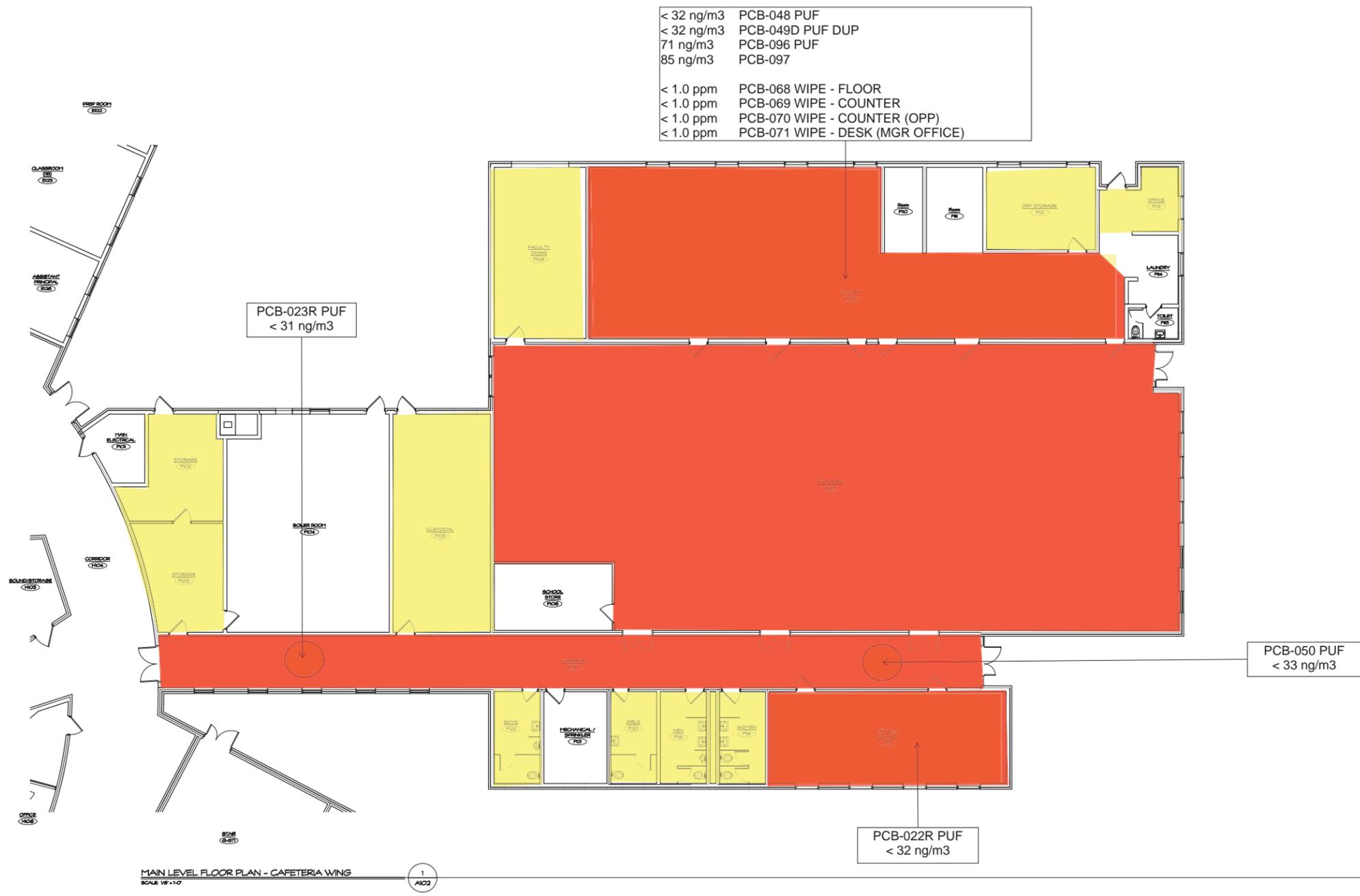


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Tel. 203 230 9007 Fax. 203 230 8247
silverpetrucci.com

Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title: **MAIN LEVEL FLOOR PLAN - ADMIN. WING**
ADMIN WING - PCB

Date: _____
Issue Date: _____
Scale: _____
As Indicated _____
Drawn By: _____
Author: _____
Project Number: _____
Project Number: **A101**



MAIN LEVEL FLOOR PLAN - CAFETERIA WING
SCALE: 1/8" = 1'-0"

Project Title:
 Owner
 Project Name
 Enter address here



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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 CAFETERIA WING
GREEN WING - PCB

Date: _____
 Issue Date: _____
 Scale: 1/8" = 1'-0"
 Drawn By: _____
 Author: _____
 Project Number: _____
 Drawing Number: **A102**



MAIN LEVEL FLOOR PLAN - GYMNASIUM WING
SCALE 1/8"=1'-0"

Project Title:
 Owner
 Project Name
 Enter address here

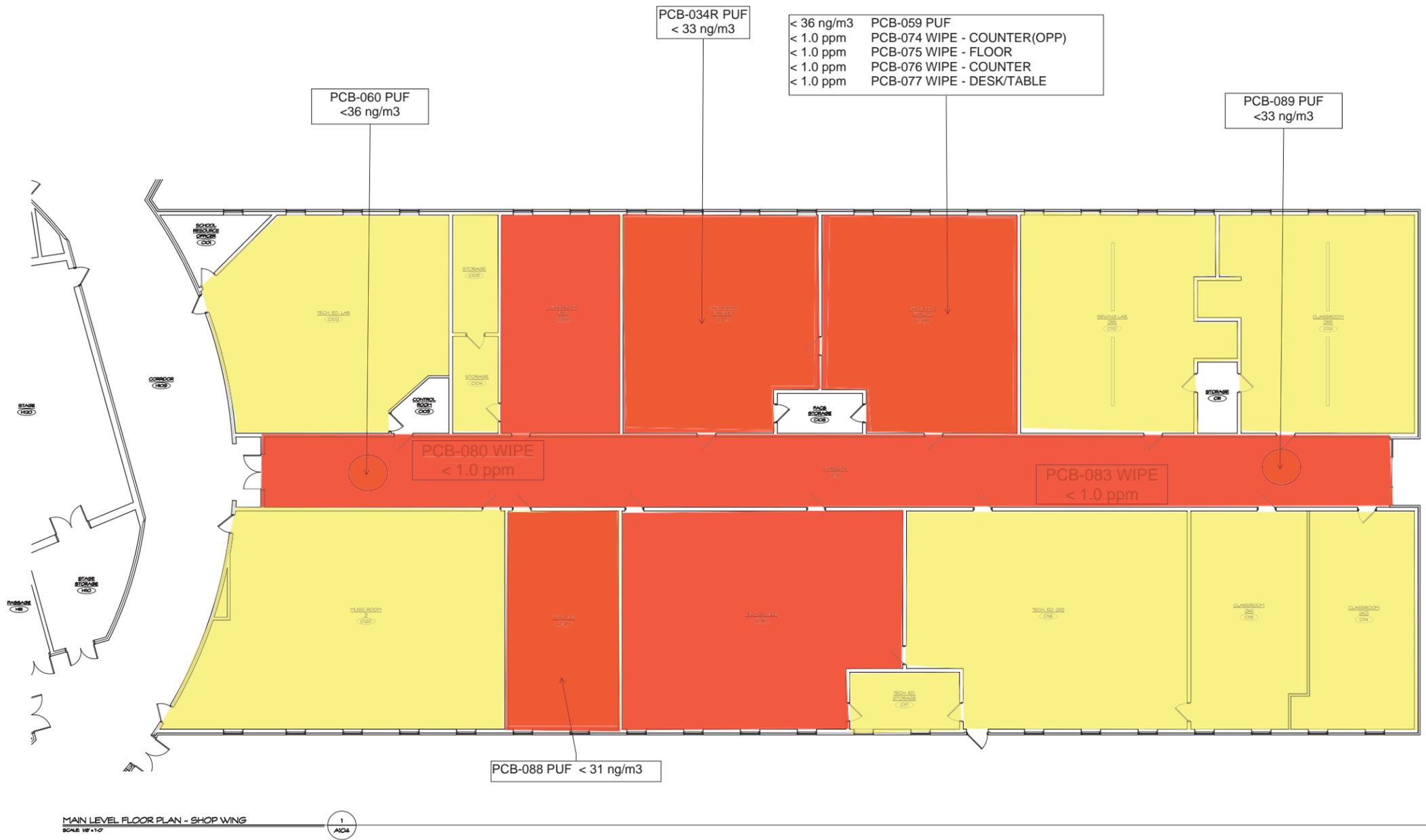


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Revision	Description	Date	Revised By
XXX		XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN -
 GYMNASIUM WING
YELLOW WING - PCB

Date:
 Issue Date:
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author:
 Project Number:
 Drawing Number:
A103



MAIN LEVEL FLOOR PLAN - SHOP WING
SCALE 1/8"=1'-0"

Project Title:
 Owner
 Project Name
 Enter address here

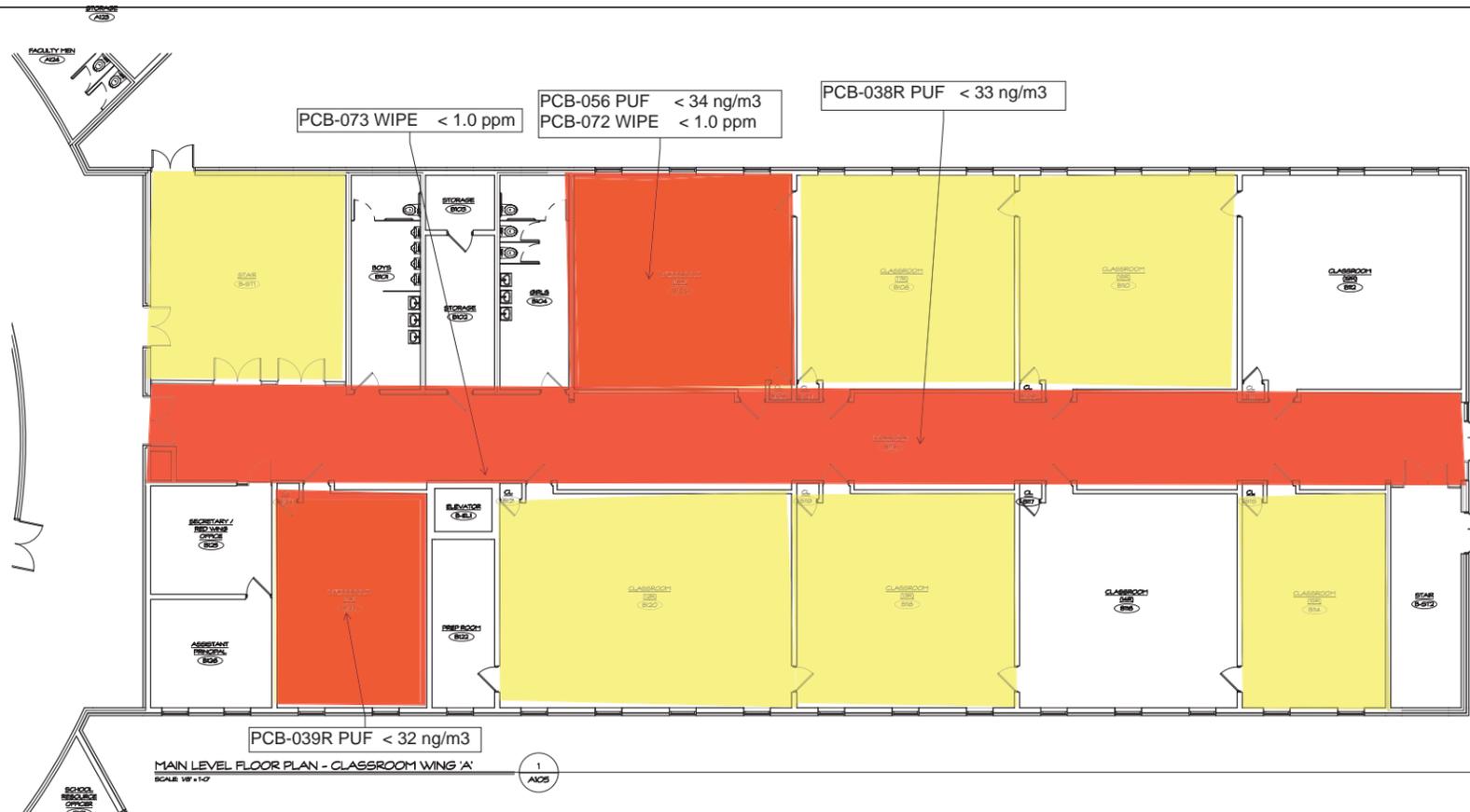


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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
 MAIN LEVEL FLOOR PLAN - SHOP WING
BLACK WING - PCB

Date:
 Issue Date:
 Scale:
 1/8" = 1'-0"
 Drawn By:
 Author:
 Project Number:
 Drawing Number:
A104



Project Title:
Owner
Project Name
Enter address here



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Revision	Description	Date	Revised By
XXX	XXX	XXX	

Drawing Title:
MAIN & UPPER LEVEL FLOOR
PLAN - CLASSROOM WING 'A'
RED WING - PCB

Date:
Issue Date
Scale:
1/8" = 1'-0"
Drawn By:
Author
Project Number:
Drawing Number:
A105



MAIN LEVEL FLOOR PLAN - CLASSROOM WING 'B'
SCALE 1/8" = 1'-0"

1
A106



UPPER LEVEL FLOOR PLAN - CLASSROOM WING 'B'
SCALE 1/8" = 1'-0"

2
A106

Project Title:
Owner
Project Name
Enter address here



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Revision	Description	Date	Revised By
Δ	XXX	XXX	

Drawing Title:
MAIN & UPPER LEVEL FLOOR
PLAN - CLASSROOM WING 'B'
WHITE WING - PCB

Date:
Issue Date
Scale:
1/8" = 1'-0"
Drawn By:
Author
Project Number:
Project Number

A106

